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THE

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A Monthly Journal of Medicine, Surgery and Pharmacy.

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MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 23rd, 1884.

T. A. RODGER, M.D., President, in the Chair.

Dr. R. L. MACDONNELL exhibited a patient with *Keloid Tumors*, supposed to be of idiopathic origin. The patient, under 40, had been under treatment at the Out-patient Department of the Montreal General Hospital for a tubercular syphilide upon his forehead, which is now rapidly disappearing under the iodide of potassium. It was found that he had two keloid tumors upon his body together with the remains of a third. The first of these appeared upon the buttock, when he was 15 years of age. It was at first painful, but as it enlarged became less sensitive. After ten years it began to shrink. Nothing now remains of it but an elongated scar. Upon the breast, lying horizontally across the sternum, just below the junction of its first and second pieces, there is a tumor which is well defined, raised above the surrounding skin, firm, smooth and elastic, and of a pink and white color. It is 7 inches long, ½ to 1 inch wide, and consists of two masses, each about half the size of an egg, connected by a band of tissue which resembles greatly the cicatricial bands seen in large scars. It made its first appearance fifteen years ago, and has been steadily growing ever since. It is more itchy than painful, and is by no means tender on pressure. A third tumor exists upon the left shoulder. It is but 4 inches long, but of exactly the same shape and appearance of that over the sternum.

Dr. HINGSTON said he had never seen idiopathic keloid; never saw keloid disappear. In traumatic keloid the skin is never movable, as in this case.

PATHOLOGICAL SPECIMENS.

Dr. SUTHERLAND exhibited the following specimens:

Kidneys and Heart from a case of Chronic Bright's Disease.—Symptoms; shortness of breath for one year; frequent micturition at night for several years. Before death, developed acute pericarditis and effusion into right pleura. Suppression of urine for 36 hours before death. Suffered acute dilatation of right heart. Kidneys reduced in size; weigh 100 gms., and are typical specimens of cirrhotic kidney. Heart shows slight degree of pericarditis: no effusion. Dilatation of both ventricles, especially of right, which extends 1½ inches to right of sternum. Tricuspid orifice greatly enlarged. Muscle substance pale and fatty but unusually tough, especially about papillary muscles.

Right Kidney, from a case of Chronic Bright's Disease, having the appendix vermiformis and cœcum attached to it.

Cirrhotic and Fatty Disease of the Liver.—Dr GEO. ROSS gave the following description of this case;—G. N., hard drinker past ten years; attack of acute nephritis three months before death; no dyspeptic symptoms till just before admission to the hospital. *On admission*—Skin moderately jaundiced (not noticed till that day); great distension of abdomen by fluid; legs œdematous; fever and delirium; severe diarrhœa, stools quite

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colorless; albumen and bile-stained epithelial casts in urine. Breathing very distressed; pulse weak. Aspirated abdomen, with some relief to respiration. Died comatose in five days, jaundice persisting. At autopsy, large quantity of fluid in abdomen; liver about normal size—good example of cirrhotic liver, which is somewhat fatty; obliteration of cystic duct by old inflammation; hepatic and common ducts free; intense duodenal catarrh especially around papilla. Kidneys large, fatty and bile-stained; vermiform appendix large, and bound tightly to lower extremity of right kidney by old adhesions, which have become organized.

Myoma of Cervix Uteri, size of small orange—Removal—Recovery.—Dr. GARDNER exhibited the specimen, which he had removed from a lady aged 52. Patient had suffered from hemorrhages and pelvic distress for 6½ years. The tumor was sessile, and dilated the cervix. The diagnosis was difficult, as there were adhesions all around between the tumor and the cervix, with the exception of posteriorly, where was an opening through which the sound entered the womb. The uterus was retroverted. The tumor was removed without much difficulty, being shelled out with the finger. There was very little bleeding. Out of 74 cases Dr. R. Lee had only seen four situated in the cervix. Dr. Gardner said that this was the fourth sessile tumor he had removed within a year, all the patients recovering. He made this statement as Mr. Tait, in his last edition, advocated the removal of the ovaries in these cases, as he had found that 50 per cent. of deaths followed removal of sessile myomata from the interior of the womb.

Dr. HY. HOWARD exhibited under the microscope, a slide given him by Dr. Spitzka of New York, shewing the origins of the roots of the 6th, 7th and 8th nerves from the medulla of a cat.

Varicocele of the Spermatic Veins.—Dr. RODDICK read a paper on this subject.

Dr. HINGSTON said the subject was interesting, as this trouble was very often seen. He prefers, when the operation is necessary, that of tying the veins and dividing between the ligatures. He had only operated three times, and now almost questioned the necessity of ever-operating. The trouble comes on, as a rule, about the age of 23, and goes away after a couple of years. He was of the opinion that it was not a cause of emissions, as the testicle is often atrophied, and therefore not so active. The mind was more affected, as a rule, than the scrotum. The ring or a truss or suspensory bandage, were often useful. He had never seen a case requiring castration.

Dr. F. W. CAMPBELL endorsed Dr. Hingston's views regarding this very common condition.

Dr. FOLEY said that Mr. Jonathan Hutchinson's treatment was purgation and elevating the testicles.

Dr. GEORGE ROSS thought the operation ought not to be swept away, for it has proved to be free from danger, and ought to be resorted to where the distress was very great. He has found palliative measures, such as the soft metallic ring, to be all that is necessary in most cases. He has not found either the truss or suspensory bandage to give satisfaction.

Dr. HY. HOWARD said there was no such thing as hypochondriasis. If the patient complained of pain there must be some physical cause. He believed that at times the operation was justifiable.

Dr. KENNEDY asked why so much fear about interfering with veins. He believed that where the operation is indicated it ought to be performed without hesitation.

Dr. RODDICK, in reply, said that the danger of working with veins was considerable. The writer of the article on this operation in "Holmes' Surgery" says that he had a case where two joints were lost from pyæmia following the operation.

Stated Meeting, June 13, 1884.

T. A. RODGER, M.D., President, in the Chair.

Dr. R. L. MACDONNELL exhibited the following anatomical specimens made from a frozen subject —1st, Cross section of the thorax; 2nd, cross section of the abdomen on level with first lumbar vertebra; 3rd, vertical section of the pelvis.

Erysipelas of the Face, followed by double Cerebral Abscess.—Dr. ARMSTRONG narrated the case. F. F., æt. 17, a student was first seen Feb. 15, 1883. For past three weeks, from over study, has been running down in health. Has suffered from vertex headache. To-day the bridge and both sides of the nose are red, swollen, hot and painful. *18th*—Erysipelas has extended over both cheeks and upwards over the lower half of forehead; had slight chill this morning; temperature 104°. *20th*—Pain at top of the head still very severe, preventing rest and sleep. He answers questions correctly, but speaks in a slow,

drawling manner. Says he hears nothing with right ear. Temperature 100°; pulse 56. *23rd*—Pulse 68, and intermittent; temperature 103.5°; opened pocket of pus in forehead. *24th*—Mild delirium present. Let out pus at root of nose. *25th*—Had good night; pulse 66; temperature 101.8°; answers questions rationally, but slowly. *26th*—Gave exit to pus at inner and upper angle of right upper lid. *27th*—Dr. Proudfoot made an incision into the orbit quite to the apex to let out pus. *March 1st*—Has had very restless night; much pain in the head; pulse 54; temperature 101.8°. *3rd*—No headache; is more intelligent. *5th*—Has had paroxysms of intense headache; Cheyne-Stokes breathing. *8th* — Constantly moaning, no delirium; pulse 60; temperature 97.8; extremities cold. *10th*—Troubled with vomiting; emaciation extreme. *20th*—Growing worse. Dr. Proudfoot made three openings around the right orbit to relieve pus, which was pushing the eye forward. *30th*—Much the same; vomiting continues. *April 14th*—Patient died of exhaustion after an illness of eight weeks and two days. At the *post-mortem* the membranes of the brain were found normal, with the exception of that portion of the dura mater covering the petrous portion of the right temporal bone; here it was of a very dark color, thickened and softened. The arachnoid and pia-mater were normal. An abscess the size of a walnut was found in each hemisphere, and similarly situated on either side. They occupied the centre of the occipital and part of the parietal lobes. They were not congested. The longitudinal sinuses were healthy. Many of the symptoms usually looked for in cerebral abscess were wanting. There was an entire absence of epileptiform seizures, rigors, paralysis, or disordered sensibility; the prominent symptoms being severe headache, delirium, vomiting, a slow, defective articulation, slow pulse, and slow, intermittent respiration. The last two symptoms were evidently due to pressure.

Dr. Ross thought the abscesses were caused from the suppuration in the orbit. In the few cases of cerebral abscess which he has had, two were in the cerebellum. The absence of typical symptoms in cases of tumors and abscesses of the brain was not uncommon.

Dr. Hy. Howard mentioned a case of supposed abscess following erysipelas of the face. He thought that all organs were liable to be affected by inflammations of the skin covering them, even when bony walls intervene.

Dr. Shepherd had seen several cases of abscess of the brain, but all from ear disease. He was of the opinion that in this case it was due to pyæmia.

Dr. Proudfoot said he had often seen this patient with Dr. Armstrong, and that there had been very little ear trouble all through—nothing, in fact, to indicate disease of the ear itself. Believed the abscess was due to the erysipelas. Had examined the eye several times with negative results.

Dr. Armstrong, in reply, said why one would think the abscess due to disease of the ear was because this was so frequent a cause, and besides, the dura mater was dark and necrosed over the petrous bone. Deafness was also present, without pressure on the auditory nerve.

High Specific Gravity of Urine.—Dr. Foley said that lately he had examined a specimen of urine of a clear amber color, containing neither sugar nor albumen, and yet having a specific gravity of 1035.

Dr. Ross said this was not very unusual. Lately he was attending a child of three years of age, who, from over-feeding, had become ill. She had an enormous appetite, but steadily emaciated. Diabetes was suspected. The specific gravity of urine was from 1037 to 1038, but contained no sugar. Examination for urea showed this present in abnormal amount. She soon recovered under appropriate treatment.

Dr. Stewart said that in all cases where there was deficient oxidation—that is, in all cases of azoturia—a high specific gravity would be seen. Correction of the diet will cure this condition.

Hysterectomy on an Insane Woman.—Dr. Trenholme read a paper on this case, of which the following is an abstract:—

Mrs. R. M. W., of London, Ont., aged 30, was married at the age of 15, previous health being good. Shortly after marriage pregnancy ensued. Excepting heartburn, nothing unusual occurred until her delivery in the spring of 1873. During labor two severe epileptoid convulsions occurred, necessitating instrumental delivery, the child being still-born. Vomiting followed, then blindness, which latter remained for some days; she eventually recovered. Again becoming pregnant, was delivered naturally of a living child in the latter part of the same year. Epileptic fits now

set in, especially at menstrual periods. On account of the rapid recurrence of these fits, a vaginal examination was made, ulceration of the o diagnosed, and treatment adopted, with improv e ment in local condition. No improvement in the fits. Patient took to alcohol for relief, and at last became insane. In 1882 she was sent to the asylum, and entered as an incurable epileptic, with erratic symptoms. Dr. Midford of Portland, who saw the patient, recommended öophorectomy, but this Dr. Bucke did not think necessary. The patient was taken out of the asylum, womb and ovary reported contracted and ovary attached. Vaginal öophorectomy was performed on 10th April, 1883; one ovary was found cirrhosed. Recovery took place, and patient menstruated at usual time, and has continued to do so ever since. No improvement mentally or with the fits, the patient was returned to the asylum. It being considered essential that the tubes should also be removed in these cases, and by abdominal incision this was decided on. This was for the purpose of exploring the pelvis for any supernumerary ovary or remains of ovarian tissue, and if the uterus was diseased, to remove it also. The operation was performed April 23rd, 1884. There was no trace of an ovary or ovarian tissue. The uterus was enlarged and densely indurated, and tubes hypertrophied. The uterus and tubes were then removed. The operation lasted less than one hour, and was well borne by patient; vomiting was somewhat severe afterwards, the patient, however, apparently doing well for the first 36 hours. After this time patient steadily continued to fail; pulse 140, and temperature 102; death ensuing 59 hours after the operation. The report states that "ever since the operation, her fits (slight ones) have been very frequent, but at no time has there been a single unfavorable abdominal symptom, and on examination after death the wound seemed to have been almost healed by first intention. Cause of death, continued and progressive shock." In speaking of this case, Dr. Bucke told me the patient had a series of epileptic fits lasting for 11 hours almost continuously, and that as she had two such attacks while in the asylum, during each of which she nearly died, he felt convinced this last attack, coming on toward the close of the second after such a severe operation, "had a great deal to do with the fatal termination." The following points connected with the operation itself are perhaps worthy of note: 1. The abdominal walls were divided in the exact median line, so that the peritoneum was reached without dividing a single muscular fibre. 2. The uterus was carried upward and retained there by means of a large rectal bougie passed up the vagina and pressed against the os uteri. 3. The uterine arteries and other vessels were secured by fine hemp ligatures, which embraced the folds of the broad ligament corresponding to each tube and ovarian ligament. 4. The uterus was divided at the inner os by a V-shaped incision, and the amputated surfaces brought together by five catgut ligatures in such a way that a simple linear incision resulted. The deeper parts of the opposed surfaces were then more closely approximated by means of quilting them with catgut, about five double or shoemaker's stitches being thus employed. 5. The deep abdominal sutures were inserted so as to carefully avoid any portion of the muscular tissue. 6. No abdominal bandage or long plaster was employed with the object of strongly encasing the abdomen, a practice fraught with no possible good, and often potent for much evil.

Upon examination of the parts removed, the Fallopian tubes were found to be occluded for about an inch from the horns of the uterus, and also very firm to the finger. The uterus was hard and about twice as large as it should have been. The cavity of the body was almost entirely obliterated, admitting the point of the probe for about a quarter of an inch only. This condition prevented any communication whatever between the tubes and uterus. Menstruation must have been from the cavity of this neck.

I much regret the issue in this case, because some two months ago I removed the ovaries and tubes from a patient who had been suffering at her menstrual periods with increasing severity up to about six months before the operation, when suicidal mania supervened, and the monthly disappeared. I had a letter from her medical adviser a few days ago, in which he says; "Miss C. is doing well, and her mental condition much improved, though hardly up to par." It may be that there are few cases of insanity which would be cured by removal of uterine appendages, yet, doubtless, there are some cases where the cessation of all sexual activity holds out the only hope of ameliorating their sad fate. Two classes of cases would seem to warrant the performance of the operation, viz., 1st, those cases of *imperfect sexual development* where the nervous energy is diverted

and expended in fruitless attempts to perfect its growth and maturation. Here may we not hope that the removal of the uterine appendages will be found to improve the mental condition, and, perhaps, in some cases restore to sanity. 2nd, Again, in an opposite class of cases, where the activity of the sexual organisation dominates the mental powers, may we not hope that the cessation of this controlling force will be followed by a calm and such a change in behavior as the results of castration in the lower animals would lead us to expect. I think these points are worthy of careful study, and hope they will be tested so as to afford statistical data for future guidance.

Stated Meeting, June 27, 1884.

T. A. RODGER, M.D., President, in the Chair.

Crushed Hand treated by dry and infrequent dressings.—Dr. SHEPHERD exhibited a patient who, some two weeks before, had received a severe crushing injury of the hand. The palm of the hand was deeply incised from one side to the other, and all the short muscles of the thumb were torn out and lying exposed in the palm. The back of the skin of the hand was enormously distended with effused blood and serum. The extended muscles were replaced, a drain inserted on the thumb side, and the wound stitched up. The back of the hand was deeply incised over each metacarpal bone to allow the effused blood to escape, and the whole dressed with iodoform and pads of naphthalized jute, covered with washed gauze, and firmly bound with an antiseptic gauze bandage. Owing to the oozing of blood the dressing had to be changed next day, at which time the drainage tube was much shortened. It was redressed as before, and as there had been no elevation of temperature, discomfort, or pain, the hand had not been disturbed since that time. Dr. Shepherd now removed the dressings before the Society, and showed that the condition of the hand was most favorable; there was union by first intention everywhere; except where the drainage tube was, the hand had quite a normal appearance, and the dressings were only stained with a little bloody serum. Dr. Shepherd remarked that this case was an example of many he had treated in the same way, and which showed the benefit and simplicity of dry and infrequent dressings.

Dr. RODGER said that he treated compound fractures from railway accidents with dry dressings of absorbent cotton and iodoform.

Sarcoma of the Skin and Cellular Tissue about the Ankle—Amputation—Recovery.—Dr. SHEPHERD read a paper on this case, and exhibited both the foot and slides from the diseased structures. The following is an abstract of the paper, which was published in full in the *Medical News* of Sept. 20, 1884:

E. M., a delicate-looking youth, aged 18, came to hospital in April last, suffering from an ulcerated swelling above the left ankle. The ankle was first injured six years ago by a fall, from which he recovered so as to walk as well as ever, although a slight swelling remained. A year after it became painful and more swollen. An unsuccessful incision was made for pus, which opening never healed. Three years ago he was kicked on this ankle by a horse, which increased the trouble. The joint itself, since the first hurt, was apparently never affected, but the swelling on the inner side slowly increased, and at different points sinuses would form. On entering hospital, the parts about the inner side of the left ankle were of a shiny, dusky red color and considerably swollen. At the upper part were several sinuses, and near the centre a small ulcer. Pressure, which gave a semi-elastic sensation, was not painful. A free incision was made. After cutting through very thick infiltrated skin, pockets of a tissue like granulation-tissue were opened up. A neoplasm was suspected, and some of the substance from the pockets was sent to Dr. Wilkins for microscopical examination. He pronounced it a very good example of the round-cell sarcoma. Dr. Shepherd at once amputated the leg at some distance above the disease, dressing the stump with iodoform and pads of sublimated jute. Decalcified bone drains were tried, but had to be given up, as they collapsed. The case did well, the temperature after the third day never reaching 99°. The case was instructive, chiefly on account of the difficulties it presented for diagnosis and the importance of its being correct, as sarcoma, especially the round-cell variety, unless removed, is a fatal malady.

Dr. GEO. ROSS asked what was Dr. Shepherd's experience with decalcified bone tubes, and why they failed in this case.

Dr. SHEPHERD, in reply, said that these tubes had been kept in carbolic oil, which made them too soft, spirit being the better fluid to keep them in. They use these tubes in New York, but have difficulty in getting them just right. Some become absorbed too soon; others never absorb,

Dr. FENWICK had found the india-rubber tubes to give entire satisfaction; in some of his cases of excision of the knee, the dressings were renewed but three times in all.

Dr. RODDICK said he made some decalcified bone tubes, and used them twice, but they became clogged. He said McEwen experienced this same trouble, and now passes horse hair through the drain. This he finds prevents clotting. Another objection to them was that the bone tubes sometimes become absorbed too fast, and leave a pocket of pus undrained.

Dr. STEWART exhibited a case of *Multiple Cerebral Sclerosis, having an Apoplectiform mode of onset, and where Syncopal and Apoplectiform attacks frequently recur.* The patient, a man aged 47, hotel porter, came under observation three months previously, complaining of obstinate constipation, difficulty in speaking, and dimness of vision. He gave the following history: Three years ago, while in the enjoyment of his usual health, he was seized, while seated on the driver's seat of an hotel 'bus, with giddiness. He was at once carried home, and almost immediately afterwards passed into a state of unconsciousness, which lasted twelve hours. After the return of consciousness, he passed, in a few minutes, into a delirious state of a few hours' duration. For some three weeks afterwards, his wife says he was "weak and useless," and "his speech was so curious that it was difficult to understand what he said." In the course of a few months he was able to speak much plainer, but not so plain as he could do previous to the attack coming on him. In the autumn of 1882 he spent some weeks in the General Hospital, and while there was under the care of Dr. Ross. Through Dr. Ross' kindness I am enabled to compare his state at that time with what it is at present. With the exception of syphilis, he never had any trouble up to the time of his present affection coming on. He formerly drank to excess, but not since the commencement of his present illness. His father died of what he calls "liver complaint." His mother and only brother are dead, but he is ignorant of the cause in either case.

Present state—Nervous system.—There is a considerable degree of mental weakness, which has only been apparent during the past year. It is progressively becoming more and more pronounced. He frequently loses his way in the streets. He is extremely emotional, laughing and crying without an apparent cause. His memory for recent occurrences is very poor, but good for trifling events of many years past. He has a very exaggerated opinion of his own cleverness. As he never received any education, he is unable to write. His speech is markedly slow, monotonous, and syllabic. The voluntary power in both upper and lower extremities is good. When he undertakes to perform any movements, the muscles commence to tremble. This tremor, however, is not always marked; very frequently it is absent, especially in the afternoon and evening. It is very pronounced immediately after getting out of bed in the mornings. The nutrition of the whole voluntary muscles, except the tongue, is normal. The patellar and superficial reflexes are present. The co-ordination and muscular sense are not interfered with. There is no disorder of sensation. There is no paresis of the bladder or incontinence of urine. There is no obstinate constipation. Dr. Buller has examined his eyes. He finds simple atrophy of both discs. Vision is *nil* in the right eye, and almost so in the left. There is no paralysis of any of the ocular muscles. Hearing, taste and smell are good. There is paresis of the respiratory branches of both facial nerves, as is evidenced by the expressionless aspect of the lower half of the face, the obliteration of the naso-labial folds, the dribbling of saliva from his mouth, and by his inability to whistle and to show his upper teeth. The soft palate is very slightly paretic. When the mouth is opened, the lower jaw trembles. He has difficulty in protruding his tongue, and when he attempts to do so it commences to tremble. There is not only difficulty in protruding the tongue, but there is difficulty in keeping it protruded. The tongue is very slightly wasted, but it is not the seat of any fibrillary twitchings. There is no impairment of either the motor or sensory divisions of the trigemminus. He has no difficulty in swallowing. He complains much of giddiness, especially when walking; objects, he says, are constantly turning around him. He is subject to both syncopal and apoplectiform attacks; both coming on suddenly, without warning,—the former lasting a few seconds, and attended with paleness of the face; the latter lasting several hours, and attended with suffusion of the face and an elevated temperature. His pulse is constantly beating between 40 and 45 times in the

minute, and at times it is irregular in rhythm. His urine is free from both albumen and sugar.

The patient's present condition was then contrasted with what it was when he was in the General Hospital, 18 months previously.* At that time the symptoms present were purely bulbar. Since that time the bulbar symptoms have gradually increased in severity, and, in addition, we have involvement of the optic tracts, cerebrum, and in all probability the cerebellum also. Although the giddiness may be explained otherwise, it is probable that its mode of causation in this case is the formation of sclerotic nodules in the cerebellum. Whether the slow pulse is a proof of the implication of the vagus nucleus, it is impossible to say. If so, it is necessary to suppose an irritative lesion of the cardiac inhibitory nucleus. The case is undoubtedly one of multiple cerebral sclerosis, commencing in the pons and medulla and gradully extending into the cerebrum, cerebellum, and optic tracts. There is no evidence of the pyramidal columns being affected either primarily by the sclerosing of their structure or secondarily by a descending degeneration. Neither is there any proof of any other portion of the cord being involved. The case is therefore one of pure cerebral sclerosis. It is noteworthy for its peculiar mode of onset, and for the apoplectiform and syncopal attacks to which the patient is liable. Another interesting feature in this man's case is the intermittent presence of tremor. In the great majority of cases of disseminated sclerosis, tremor on voluntary movement is the most constant and most characteristic symptom present.

Dr. Geo. Ross said he had not seen the patient since he reported the case to the Society. At that time he had recently had an attack, apoplectiform in character, which he believed to have been due to a hæmorrhagic clot.

In reply to Dr. Roddick, Dr. Stewart said his patient had taken iodide of potassium.

Dr. Hy. Howard said that these cases of sclerosis vary so much that it is difficult to group the symptoms so as to tell positively whether the brain or the cord was affected primarily. Erb says that out of 200 cases, 171 were syphilitic, and the cord was first affected. Dr. Howard's own observations showed that 7 out of 10 had syphilis. A man in the asylum denied having had syphilis till the marks were found; his first symptom was impotency. He (Dr. H.) had never seen a case cured. Insanity in those cases of progressive paresis was caused by reflex action from the cord where it is diseased to the higher nervous centres, which are the lowest organized.

Cancer of the Stomach; rapid growth of the tumor.—Dr. Campbell related the following particulars of this case:—Had been sent for early in May to see Mrs. L., aged 41, who was complaining of pain over the stomach, but not very severe. As her mother had died of cancer, he was pretty sure this would prove to be the same trouble, although no tumor could, as yet, be made out. Within a week vomiting set in. *June 1st*—Rather worse. *5th*—Could keep nothing on her stomach. On the 7th, could feel a nodule, which, in 48 hours, increased wonderfully from being the size of the top of the thumb to that of a walnut. The vomited matters were the color of bile—never bloody. The patient died a week later. The pylorus and lesser curvature were implicated. There was stenosis, but not much dilatation of the stomach. Pain, which was never very severe, was less toward the end. There was no cachexia present.

Dr. Teenholme said he had had two similar cases. In one, there were no symptoms till within three or four days before death, although a cancerous mass the size of a turnip existed, which involved the stomach; the other was that of an old gentleman, who ate well up to the last, and had very little pain.

* A detailed report of his then state will be found in the Society's Transactions recently published. Dr. Ross gave an account of his condition at the meeting held on December 1st, 1882.

Progress of Science.

THE CHANCROID AND ITS TREATMENT.

By J. Henry C. Simes, M.D.

The question of the treatment of any venereal sore is one which has of late years given rise to two methods of therapeutics. On the one hand we have those who advocate, as a rule, the application of some destroying agent to the lesion, and, on the other, those who are opposed to any form of cauterization.

To consider the subject in a satisfactory manner, it becomes necessary that an understanding of the nature of the lesion should be at least approximated, since much will depend upon the opinion we hold in regard to the affection.

Without entering into a discussion upon the various theories of the duality or unity of the vene-

real sore, I will divide them into two varieties, those which are followed by syphilis and those which are not. That these two kinds of sores are met with, all experience is an evidence of the fact. The doubtful and disputed point is to know where to draw the line, to differentiate between an infecting and non-infecting lesion. That it is possible, in every case, to determine, with absolute certainty, the precise nature of every venereal sore, all writers are agreed in the opinion that such accuracy of diagnosis cannot be reached. There are, however, in most cases of venereal sores, some symptoms which justify us in placing the lesion under one of the two varieties. It is well, in every doubtful sore, never to give a positive opinion of its nature, but wait until the time for constitutional symptoms has arrived, and then all doubts will be removed. Indeed, it may be considered prudent, in no case of venereal sore to commit ourselves to a positive opinion, until we are satisfied the time for systemic infection has passed. Our diagnosis may be correct in ninety-nine out of a hundred cases, but there always exists the possibility of error; and where so much depends upon the opinion of the surgeon, not to the patient alone, but to his family and society, it is imperatively our duty to use every precaution to protect all against such a misfortune as may follow a hasty and wrong diagnosis. The symptoms which accompany the non-infecting venereal sore—the chancroid—may be summarized as follows: The origin of this lesion is usually due to contact with pus from a similar lesion, or to accidental inoculation of the secretion of a chancre upon a person already affected with syphilis. And I am also inclined to believe the possibility of the formation of a chancroid from pus other than that obtained from a chancroid, or, in other words, from pus from other sources. The stage of incubation of a chancroid is so irregular and uncertain that such a period may be regarded as not existing, and is of no value as a diagnostic symptom, except in a differential diagnosis from the infecting sore. The seat of the chancroid is, almost without exception, either upon the glans penis or prepuce. The possibility of a chancroid occurring at any other locality cannot be denied. Writers of unquestionable ability have met and described such lesions. That they are of the greatest rarity must be admitted, since seventy or eighty will cover all the reported cases, while those of the glans penis and prepuce may be counted by the thousands. The chancroid begins as a pustule or ulcer; it is irregular in shape, the edges are sharp cut, and often undermined, its surface is uneven, whitish, pultaceous; it secretes an abundant purulent discharge, which is readily auto-inoculable, and, therefore, the chancroid is usually multiple. Pain is a prominent symptom. There exists no characteristic induration, such as is met with in the infecting sore, but, exceptionally, the lesion is accompanied with an œdematous inflammatory swelling, which, in a measure, resembles the specific induration of a chancre. This is more especially the case when any irritant has been applied to the sore, such as a caustic. It, however, differs from the chancre induration, in that there is no marked limit to the swelling, but it gradually blends with the healthy tissues to which it is adherent; and, finally, it differs from the specific lesion, by disappearing with the healing of the sore. Again, the chancroid has no regular course; it may recover with rapidity, or it may be extremely slow in healing, enlarging and extending over a large extent of surface, in fact, becoming phagedenic. No protection of the system is afforded against a second attack by a previous infection. Inflammation and suppuration of the neighboring lymphatic glands is a very frequent complication of the chancroid. The histology of the chancroid presents nothing characteristic of the lesions; it is an ulcerative process, due to an inflammatory action, and therefore results in a loss of substance. No distinction can be histologically made between a chancroid and an ulcer due to any irritant which occasions inflammation and ulceration.

A sore with the above history, and presenting the symptoms I have enumerated, may generally be regarded as a local non-infecting lesion and treated as such; but, as previously mentioned, it may possibly be followed by constitutional symptoms, and therefore, while giving all encouragement of a hopeful kind, it is well to be cautious in expressing any positive opinion. A case in point recently came under my observation. Two men had connection with the same woman, in immediate succession. During the following week they both presented themselves to me, and upon both, in the furrow between the glans penis and prepuce, were seen painful, irregular, multiple, and profusely discharging purulent sores. The same treatment was applied to both, and they both progressed favorably for a certain time. Their termination, however, differed; one, he who had connection with the woman first, entirely recovered; the other, about three weeks after the exposure, returned with the sores unhealed, and, upon examination, quite a different state of affairs was seen. There was in the preputial furrow a sore presenting very markedly all the objective symptoms of an indurated chancre; also the characteristic indurated inguinal glands of lymphatic contamination were observed. Here I have no doubt constitutional syphilis will eventually follow in due time; as yet the systemic involvement has not made itself manifest. Such cases, although they are seldom met with, should teach us that caution in expressing our opinion cannot be too rigorously observed.

Fortunately the treatment of the venereal lesions does not, in either case, materially affect the result. That is to say, it matters but little whether we have to do with a simple local venereal sore, or a sore which will be followed by syphilis. In both the same method of treatment is now advised by most writers upon the subject. In both the thera-

peuties is to be strictly local, but it is as to the nature of the local treatment that there arises a difference of opinion. One author advises us to cauterize every case; another rarely employs this method, and only to meet special indications.

The application of cauterizing agents to venereal sores has always been one of the methods of treatment in this affection. The reasons for its adoption can readily be understood, when we remember that, previous to the separation of venereal sores into two classes, the infecting and non-infecting, it was noticed that very often constitutional contamination did not supervene, and it was generally believed that the destruction of the virus contained within the sore by the cauterizing agent had prevented such contamination. Now, however, we know that it was not the treatment which prevented an outbreak of syphilis, but no infection had taken place, and therefore there had been no preventive treatment.

After the division of venereal sores into infecting and non-infecting, the application of caustics has been continued, on the ground that each variety of sore contains within itself a specific virus. That this is true of the infecting variety none deny; but that there exists any specific element in connection with the non-infecting sore is a question which, at the present time, is disputed by a few authors. I do not propose now to enter into a discussion upon the specificity or non-specificity of the chancroid, but may say that a study of the subject has led me to think there still is room for investigation, and that, viewing the subject from a therapeutical standpoint alone, the specific nature of the chancroid, as far as my experience goes, need not be admitted. My reason for adopting this view of the subject is based upon the investigations of a practical kind which I have carried out during the past year. Within this period there came under my observation seventeen cases of chancroid; of these five were treated by caustics previous to coming under my care, thus leaving twelve cases which I saw from the beginning to the end. Among this number the different varieties were met with, as single, multiple, concealed, etc., thus offering a favorable opportunity for my investigations.

From frequent employment of the cauterizing agents in this lesion, I had seen some of the disadvantages they occasioned, and more particularly the pain. This is always severe and at times intense, notwithstanding the use of a local anæsthetic, such as carbolic acid, previous to the caustic application. The administration of ether or chloroform to produce general anæsthesia is, in my opinion, not admissible in such cases, except in rare and unusual circumstances. If, therefore, the same results could be obtained by not applying any such severe means of treatment, it certainly would be a great gain, and from the fact that such a claim had been made, a trial of the method advocated by those who do not employ caustics seemed at least justifiable. Therefore, I determined to omit all cauterizing agents in my treatment of the chancroid, provided no ill-effect arose from the omission.

The number of cases treated, as above stated, were twelve, and in none did I find it necessary to resort to any cauterizing agent, in none did any complication arise during treatment, and in all a favorable termination was the result. One of the greatest difficulties the surgeon will meet with in following out this method of treatment is the patient himself.

Such a firm hold has the caustic treatment, not only upon the medical mind, but equally so upon the public, that the patient is not satisfied unless you "burn" his sore, and you must constantly call his attention to the progress the sore is making towards recovery, in order to reconcile him to the non-cauterizing treatment. Having succeeded without "burning," I doubt if you ever will be able to convince a patient of the necessity of a caustic, if he should be so unfortunate as to contract another chancroid.

It could scarcely have been a coincidence, but it is the fact, that in not a single case in which the cauterization was omitted was the lesion complication by an adenitis. While, on the contrary, in four or five cases which had been cauterized previously to coming under my observation, there was developed, or there existed at the time they presented themselves for treatment, a suppurating adenitis or periadenitis.

One of the most important, and for some the only reason that cauterizing agents are applied to the chancroid, is to prevent auto-inoculation, or a multiplication of the sores. There is no doubt but that a thorough application of a caustic will prevent auto inoculation. The remedy is very severe, and frequently complicates the lesion by occasioning a very intense local inflammatory action, and also, to my mind, the exciting cause of the sympathetic adenitis in many cases. That such cauterization is unnecessary, and that auto-inoculation may be prevented by other means, is demonstrated from the results obtained in my cases. In none was there any increase in the number of sores after treatment had been commenced.

Those who advocate the non-cauterizing method of treatment of the chancroid, regard the lesion as an ulcer, which may be caused by any irritant, and in this case the irritant is an acrid pus, coming in contact with a special part of the body, which, from its peculiar histological structure, is liable to develope the special form of ulcer characteristic of the chancroid. Therefore, they claim that the treatment applicable to ulcers in general is equally suitable for the chancroid. Thus anodynes, sedatives, astringent and stimulating applications have each their sphere of action in assisting nature to heal the lesion. The kind of medication to be employed will depend upon the symptoms presented by the sore, and judgment in the selection of the remedy is a very important element in obtaining success.

No definite rule can be given for the treatment of every case, but where there is no complication, the sore presenting the typical symptoms, the treatment which I have employed and found satisfactory, may be stated as follows: The discharge from the lesion is, as far as possible, to be prevented from collecting upon and around the sore; this may be done by frequent washings with water. The surface of the sore is kept dusted with iodoform, and is covered with a pledget of absorbent cotton. The simplicity of this treatment is a stromg recommendation, and I can answer for its efficiency. Let me here say, the employment of iodoform is not from any supposed specific action of this drug; but, on account of the favorable impression it exerts upon any ulcerated surface. An objection, and a very serious one, to the iodoform application, is its penetrating, lasting and extremely unpleasant odor. This, however, can in a great measure be obviated by exercising great caution, in its application, not to permit any of the powder to come in contact with the patient's clothing; confine your dusting exclusively to the ulcerated surface, and carefully cover the part with cotton. A few drops of oil of rose added to the iodoform is also of service in masking its odor.

Where the iodoform treatment cannot be used, on account of some complication, such as a contracted prepuce, or intense inflammatory action, or refusal of the patient, then the other forms of medication may be resorted to, selecting such as the symptoms of the sore seem to indicate. I am inclined to think the advantage of the idoform treatment over others is to be found only in the greater rapidity with which the process of healing progresses.—*Philadelphia Polyclinic.*

THE TREATMENT OF CROUP AND DIPHTHERIA

BY INHALATION OF THE FUMES PRODUCED BY THE COMBUSTION OF A MIXTURE OF TURPENTINE AND COAL-TAR.

Dr. Delthil, of Nogent-sur-Marne (Seine), in a memoir presented to the Academy of Medicine at Paris, March 25th, 1884,* advocates, in the most enthusiastic terms, the treatment of diphtheria by a method which he claims to be "specific" for diphtheria have been so often and so confidently urged upon the notice of the profession, only to fall into desuetude when tested by more extended experience, and with a more critical spirit than has fallen to the share of their advocates, that physicians will naturally look with suspicion upon what seem *a priori* to be extravagant claims. Nevertheless, a careful perusal of this memoir cannot fail to impress the reader with the modesty, sincerity and accuracy of the author; qualities which, joined to the honorable titles he holds, require at our hands a careful and conscientious consideration of the facts and arguments he sets forth. The writer confesses to having arisen from the study of Dr. Delthil's brochure with a strong prepossession in favor of the author, and a decided disposition to test the practice upon suitable occasion.

Assuming the verity of the theory, "universally held as demonstrated," of the parasitic origin of diphtheria, Dr. Delthil propounded to himself the following question: "What microbicide may we employ, which, with disintegrating powers upon the false membrane, will conjoin the property of penetrating the system by means of the respiratory tract, and which, without danger to the economy, can reach and combat the generalized diphtheritic poison?" After a lengthy series of experiments, he has made choice of essence of turpentine, as combining in itself all the desiderata. Thus, it will detach and disintegrate the diphtheritic exudation (Laboulbene); it is a parasiticide whose virtue needs no more to be demonstrated (Bouchardat); and it can be employed in the requisite quantity without danger to the economy.

The next point to be solved was the best method by which to apply the remedy. His experiments in this direction have been prosecuted more than eight years. He has used nebulizations of turpentine; direct applications to accessible parts; the introduction of liquid turpentine into the larynx by means of a syringe; the evaporation of hydrocarbens from a receiver of turpentine, contained in a waterbath, at a temperature of 50° to 60° (Centigrade). None of these methods proving satisfactory, he resorted for a long while to the following:—

In the patient's apartments were placed several large dishes, each containing a kilogramme of coal-tar seven or eight tablespoonfuls of oil of turpentine and about one hundred grammes of oil of cajuput. This mixture was allowed to evaporate. Besides this, he threw upon hot coals, every hour, a quantity of a powder containing equal parts of benzoin and coal-tar, and subjected the patient to fumigation with the vapors thus produced. In addition, accessible parts were washed with a solution of coal-tar and with lime-water.

He obtained from these methods very satisfactory results, but not sufficiently conclusive to warrant publication. He was struck, however, by the notable diminution in his practice of cases of laryngeal croup necessitating tracheotomy.

The great objection to the practice lay in the fact that, together with the respirable and beneficial vapors, there were also disengaged traces of creasote and of acrolin, disagreeable and unsuitable for respiration, and producing in some instances a sort of suffocation.

For these reasons he was led to modify his procedure; and for the benefit of all interested he has given the unsuccessful and partially-successful plans, as well as that which he now feels warranted in laying before the profession as a specific treatment for diphtheria.

* D'un Traitment spécifique de la Diphthérie, par la combustion d'un Mélange l'Essence de Terebenthine et de Goudron de Gaz. Paris, H. Lauwereyns, April, 1884.

Persuaded that the carbides liberated by the combustion of turpentine and of gas-coal-tar are capable of absorption without danger, and that they penetrate the respiratory tract; believing, too, that this is equally true of the free carbon carried up by the vapors, as demonstrated by the anthracosis of miners, he conceived the idea of setting fire to the mixture of tar and turpentine. This produced the happiest results. Rapidly the false membranes become softened, the catarrhal period is established in a few minutes, and, particularly remarkable, the fumes, though so thick as to obscure the light, do not produce cough.

The volatile hydrocarbons and other empyreumatic products, impregnate the mouth, the nasal fossæ, the larynx, the trachea and the bronchi. The patient seems enveloped in a kind of tarry varnish. The false membranes, softened, disintegrated, and covered with carbon, are easily expelled. Turpentine is essentially assimilable, says Dr. Delthil, by the respiratory mucous membrane, as is demonstrated by the odor it transmits to the urine of painters. Under the influence of these fumigations the urine of his patients acquires, with rapidity, the odor of violets. The drug traverses the whole economy, and is eliminated by the natural filter of the kidneys, playing the rôle of a parasiticide throughout the whole organism.

Five cases of diptheria have come under the author's observation since the adoption of his latest method. Recovery has taken place in all. Two cases are recorded at length. In both of these tracheotomy was necessary; but Dr. Delthil thinks that it should have been a useless operation without the employment of the turpentine and coal-tar fumigations. In one case, that of a child of four and one-half years, at the time he was called in consultation the false membranes filled all the base of the throat, and laryngeal croup menaced the patient with asphyxia. The child was cyanosed, the supra-sternal recession was extreme, anæsthesia pronounced, agitation excessive, the voice was extinct, the croupal cough infrequent. An old wound on the right hand had become covered with diphtheritic exudation. There was albuminuria. Tracheotomy was thought of as a desperate resource, and the time for operation fixed at 11 P. M., it being then 10 P. M. Meanwhile, thinking the fumigations could but prove beneficial, he made resort to them. In less than an hour, such an extraordinary amelioration took place in all the symptoms that it was decided to postpone the operation. The day passed well. Respiration was re-established, the croupal cough resumed its characteristic intensity, but with a decided catarrhal *timbre*. The child was able to take nourishment. A partial extinction of respiratory murmur in the right lung indicating obstruction of the origin of the right bronchus, he began to fear an ascending croup. These fears were verified, and the urgent symptoms returned on the eleventh day of the disease, four days after the first menace of asphyxia, so happily dissipated. Thinking to gain more direct access for the vapors, he now proposed tracheotomy to the family, but they declined. A few hours later, however, they begged him to operate. Though he felt that the case was desperate, as he would find only a canal completely blocked with false membranes, he consented. After having incised two rings of the trachea, it was necessary to incise two more, in order to find entrance for the canula, so abundant was the exudation. The suffocative symptoms were but slightly diminished; under ordinary circumstances death would have occurred after but a brief delay. As a supreme resource he fired his mixture; the fumes became disengaged with an intensity that hid each one in the apartment from the view of the others. In a few moments the false membranes became diffluent, and under the eyes of eight observers a mass of disintegrated, membranous flakes covered with carbon, poured out through the canula. Dr. Delthil feels justified in asserting that in the absence of the fumigations the operation would have been futile, and the child would have been asphyxiated, even at the moment the canula was inserted.

The other case detailed is, in some respects, even more remarkable than this.

Dr. Delthil calls attention to the prophylactic virtue of his fumigations, as exemplified by the uniform escape from contagion of parents and attendants, and the healing without ill-result of a wound received by himself during operation.

He is endeavoring to perfect the apparatus for the employment of his treatment, which is at present very primitive. Meanwhile, he wisely cautions against the risks of fire. The receptacle of the mixture to be ignited must be surrounded by an additional vessel, to prevent accident, in case the first one should be broken by the intensity of the combustion. The two vases must be placed on the floor in the middle of the room. All inflammable objects are to be removed.

The large bottle or other vessel containing the stock of turpentine must be removed from the room; and nothing must be added during the combustion of the mixture. The flames may be extinguished at will by casting over the vessel a woolen cloth.

The proportions recommended by Dr. Delthil are as follows—to be modified according to exigencies: Gas-coal-tar (Norwegian tar will not answer; better use turpentine only), 200 grammes; essence of turpentine, 60 grammes; or the same of turpentine alone. The mixture to be renewed every two or three hours, according to the gravity of the case, and the amelioration produced.

We summarize the following from his conclusions: The fumes are easily supported by the persons in attendance upon the patient, and, indeed, benefit these persons by virtue of their prophylactic influence. Resorted to in time, this treatment will obviate the necessity of tracheotomy; and in old, desperate cases, will transform

that operation from a hopeless last resource, to an almost certain remedial measure.*

Although we cannot accept Dr. Delthil's treatment as a *specific* for diphtheria, the facts before us seem to show that it is likely to prove beneficial in a large number of cases. It certainly deserves trial.—*S. Solis-Cohen in Philadelphia Polyclinic*

INTESTINAL INDIGESTION.

A Clinical Lecture Delivered at the Children's Hospital, Philadelphia.

By Louis Starr, M.D., Lecturer on Diseases of Children in the Post-Graduate Course of the University of Pennsylvania. Reported by Wm. H. Morrison, M.D.

Gentlemen :—The previous history of the little patient before you is very incomplete, since we can learn nothing except that she has been in bad health for some time. She is eight years old, and sufficiently tall for her age, but her face and limbs are thin. The muscles, however, are firm, and the skin is only slightly deficient in softness and flexibility. Her general strength is fair. The cheeks, as you will notice, have a moderately good, red color, and there are no dark rings around the eyes, although, if you will look closely, you will see that the conjunctivæ have a distinctly yellow tinge. Her tongue is perfectly clean, the papillæ normal, and the mucous membrane of the mouth healthy. Her appetite is good, there is no increased thirst, and she has neither vomiting nor eructations of flatus or sour liquid. She does not complain of abdominal pain, and the bowels are said to be opened daily; but I am inclined to doubt this statement, for the belly is very greatly distended, and you will at once be struck with the contrast which this part of the body bears to the rest. While thus markedly altered in size, the abdomen is painless on palpation, and percussion elicits a tympanitic sound, showing that the enlargement is due to gaseous distension and not to the presence of a solid tumor. The hepatic and splenic dulness are not increased. The heart and lungs are free from disease, there is no alternation in the pulse or surface temperature, and the urine is voided freely.

Now, what conclusions can be drawn from the points elicited in this case? In the first place, we can say positively that there is no gastric disorder, for the tongue is perfectly clean, the appetite good and neither eructation, increased thirst, nausea nor vomiting is complained of. Still, the only symptom presented, viz., the uniform, great gaseous distension of the abdomen, indicates deranged digestion; consequently, we must look to the intestinal canal, or its accessories, for an explanation of the trouble. As already indicated, it is difficult to account for the absence of abdominal pain and disordered action of the bowels under the circumstances; but since these symptoms are denied by the patient, let us see if the meteorism can be referred to any other cause than simple intestinal indigestion. The abdomen is uniformly distended, is painless on palpation, there are no indications of a tumor, and very little constitutional disturbance, so that we may at once put intestinal obstruction from intussusception or fecal accumulation, for instance, out of the question. Sometimes, in ataxic cases, the muscular coat of the intestine, sympathizing in the general debility, ceases to afford the normal resistance to the contained gases, and these expanding greatly distend the gut; but this cause cannot be acting here, for the patient is but little below par. Caseation of the mesenteric glands (tabes mesenterica), especially when complicated, as it frequently is, with ulceration of the bowels, has meteorism for one of its symptoms; but there is at the same time diarrhea and all the signs of chronic interference with the nutritive processes. Under such conditions the child wastes and grows pale and feeble, the face looks haggard, the sleep is disturbed, the appetite is capricious, and thirst increased. Dilatation of the abdominal veins is often noticed, and occasionally edema of the feet and legs is met with, while the discovery of an irregularly-shaped, slightly movable tumor in the umbilical region makes the diagnosis certain. These symptoms are entirely different from those presented by this case.

We are entirely justified, then, in attributing the meteorism to intestinal dyspepsia, which is the most common cause of abdominal distension in children.

Let us next study the manner in which the symptom is produced. There are no indications of impaired gastric function, and I think that we can assume that, as far as the stomach is concerned, the work of digestion is well done; but you know that only the albuminous articles of the diet are digested in the stomach, that a part even of this class of food passes the pylorus unaltered, and that the starches and fats are unaffected by the gastric secretions. In the intestine, therefore, some of the albumen and all of the starch and fat of a meal must be digested. This is mainly accomplished by two secretions poured into the upper part of the duodenum, namely, the bile and the pancreatic juice; of these the first takes the lesser part, merely assisting the gastric digestion and helping to emulsify the fats—the bulk of the work falling upon the second.

The pancreatic juice contains four ferments: *a*, trypsin, which converts albuminous matter into peptones; *b*, curdling ferment, which curdles the casein of the milk; *c*, pancreatic diastase, which changes into sugar and dextrine, and *d*, emulsive ferment, which emulsifies and partly saponifies the fats. The major part of digestion is, therefore, accomplished in the intestine, and the pancreatic secretion is the most powerful and important agent;

* Since the above was in type, we notice [*Med. and Surg. Reporter*, Philadelphia, July 5th, 1884, from *Deutsche Med Zeit.*, May 22d, 1884,] that Dr Delthil has employed these fumigations in four additional cases in which tracheotomy had been performed for laryngeal diphtheria. One case recovered. Dr. Féréol resorted to the method in the treatment of one adult, who recovered. This makes, altogether, ten cases, with seven recoveries. In six of the cases tracheotomy was performed, with three recoveries. These statistics, so far as they go, are quite favorable.

consequently, if this gland is at fault, if its secretion is diminished in quantity or poor in quality, more or less of each meal will remain in the intestine undigested, notwithstanding the fact that gastric digestion may be perfect.

You know, from a former lecture, that this undigested food, lying like a foreign body in the gut, irritates the delicate mucous membrane, causing catarrh with its uniform result, a hypersecretion of mucus; and, from what has just been stated, you will infer that starch is one of the substances most likely to be imperfectly digested. There is present, then, a fermentable substance, starch, a ferment, mucus, and one of the encouraging conditions of fermentation, an elevated temperature. Of course but one result can be expected, fermentation is set up, carbonic acid gas is liberated, and the intestine becomes distended.

As this explanation implies a catarrh of the intestinal mucous membrane, it would be interesting and satisfactory if we could find some proof of the existence of this condition in our patient. Constipation and the presence of mucus in the fecal evacuations, the common pathognomic symptoms, are wanting; but look again at the eyes: the conjunctivæ are, as you observe, quite yellow, indicating a slight degree of jaundice. Now jaundice, both in children and in adults, is most frequently catarrhal in its origin. In other words, it is due to more or less complete obstruction of the common bile duct by catarrhal swelling of the mucous membrane with the accompanying increased production of mucus; a lesion which is usually simply an *extension* of a pre-existing catarrh of the duodenal mucous membrane. Here, then, is the evidence which I think establishes the diagnosis.

For the successful management of this case a careful regulation of the diet is important. The starches and fats must be excluded, because they are digested in the intestine, and it is this portion of the digestive tract which we have found to be at fault; the starches are also unsuitable, on account of their liability to undergo fermentation, with the production of gas, and a consequent increase of the abdominal distension. Three meals a day of the following articles of food should be taken. For breakfast, at 7.30 a.m., a bit of fresh fish, or the lean of a mutton chop, or a piece of tender beefsteak, with milk (either warmed or not, according to taste), and a single thin slice of stale bread, without butter. For dinner, at 2 P.M., the soft part of half a dozen oysters, a bowl of meat broth entirely free from fat, or, instead of this, a piece of lean beefsteak, roast mutton or beef, a little spinach, or well-boiled cauliflower tops, and not more than a single slice of thin, unbuttered bread. For supper, at 7 o'clock in the evening, one or more glasses of milk, with a single slice of unbuttered bread. For drink, she must take nothing but filtered water.

The medicinal treatment must be directed to the improvement of the impaired intestinal digestion; and, as this has been traced to an inactive pancreatic secretion, we must endeavor to artificially supply the deficiency. Just as in cases of stomach dyspepsia, due to alterations in the gastric secretion, we administer with the food pepsin and muriatic acid, or supply an artificial gastric juice. Within the past few years a number of preparations have been introduced, purporting to contain the active principles of the pancreatic juice. One of these, Fairchild's Extractum Pancreatis, I have lately used extensively, and so far with very satisfactory results. To obtain these results, however, several things must be borne in mind: first, that the normal pancreatic juice is alkaline in reaction, and that acids greatly impair, if they do not actually destroy, the activity of its ferments; second, that in health, the pancreas throws out its secretion most freely from two to three hours after a meal has been swallowed, or about the time that the food is passing from the stomach into the small intestine; third, that at this time the contents of the stomach are still acid in reaction. These facts show us that, to be of any service, the Extractum Pancreatis must be given at the proper time, two and a half hours after taking food, and must be safely conducted through the stomach, a feat accomplished only by guarding it with a full dose of an alkali, as bicarbonate of sodium.

The proper dose for a child of the age of our patient is 2½ grains. I shall order her the following prescription:

℞—Ext. Pancreatis, gr. xxx.
Sodii Bicarb., ʒj.
M. et fit., chart, No. xij.

Sig. One powder to be taken 2½ hours after each meal.

Nux vomica is also indicated, partly to give tone to the muscles of the intestine, which must be in some decree weakened by the constant distension, and partly to encourage proper glandular action. I shall therefore order three drops of tincture of nux vomica with a teaspoonful of compound infusion of gentian, before each meal.

Finally, to assist in the reduction of the abdominal distension, it will be well to rub the belly thoroughly twice a day with a stimulating liniment, such as turpentine and olive oil, one part to three. —*Archives of Pediatrics.*

COCAINE AS A LOCAL ANÆSTHETIC.

Dr. Koller, of the Vienna General Hospital, has quite recently discovered in cocaine a valuable agent for the production of local anæsthesia. He found that the introduction of from one to three drops of a two per cent. watery solution of cocaine into the corneal chamber rendered both the conjunctiva and cornea completely insensitive, so that, for instance, the cornea could be partially gouged without exciting any reflex action or sense of pain. The same fact was demonstrated by Drs. Brettauer and Becker at the recent Ophthalmological Congress. Koller in his first report mentioned the employment of the same agent in the production of anæsthesia of the larynx.—*Lancet*, October 4, 1884.

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INSANE ASYLUMS IN THE PROVINCE OF QUEBEC.

Among the many distinguished men who visited Canada, to attend the meeting of the British Association for the advancement of Science, was Dr. Daniel Hack Tuke, editor of the *Journal of Mental Science*, and an alienist of acknowledged celebrity. As was natural, he was desirous of seeing how the insane were treated in Canada, and as Montreal was the place where he first sojourned for a limited period, the Insane Asylum at Longue Pointe, within a few miles of the city, was the first Institution for the reception of the insane which he visited. He was accompanied in this visit by Dr. Henry Howard, the Government Visiting Physician to the Asylum, and Dr. George Ross, editor of the *Canada Medical and Surgical Journal*. He subsequently visited the Asylum at Beauport, near Quebec, and as he journeyed through Ontario he visited several of the Asylums in that Province. The opinion which he formed of the treatment which the insane were receiving at both Asylums in the Province of Quebec was, that it was lamentably behind the age, and calculated to bring us into great disrepute,—that of the Asylum near Montreal being especially of a character to be condemned. Indeed, as he detailed to his medical brethren from the British Isles what he saw, we know that the universal expression was one of astonishment that such a state of things could possibly exist among a community showing in everything else an advanced state of civilization. On his return home he embodied what he saw, and his opinion thereon, in the form of a report, which he forwarded to the Provincial Secretary of this Province. Such a report was in its nature entirely gratuitous, and its preparation clearly shows how deeply Dr. Tuke felt the unfortunate position we occupied in this matter. This report was published first by our contemporary, the *Canada Medical and Surgical Journal*, and subsequently has appeared, either complete or partially, in nearly every journal in the Dominion. Its publication has created immense excitement. We do not publish the report entire, but make room for a few extracts. After giving a general description of the building, and stating that the cleanliness of the hall, reception rooms, and *apothecaire*, were such as to attract attention he says:

"It is as we ascend the building that the character of the accommodation changes for the worse. The higher the ward the more unmanageable is the patient supposed to be, the galleries and rooms become more and more crowded, and they look bare and comfortless. The patients were for the most part sitting listlessly on forms by the wall of the corridor, while others were pacing the open gallery, which must afford an acceptable escape from the dull monotony of the corridor. The out-look is upon similar galleries in the quadrangle at the back of the building; and to a visitor the sight of four tiers of palisaded verandahs, with a number of patients walking up and down the enclosed space, has a strange effect. These outside galleries are, indeed, the airing courts of the asylum. There are no others. If the patients are allowed to descend, and to go out on the estate, they do so in regular order for a stated time, in charge of their attendants, like a procession of charity school children. Those who work on the farms must be the happiest in the establishment."

"In the fourth tier were placed the idiots and imbeciles—a melancholy sight necessarily, even when cared for and trained in the best possible manner, but especially so when there is no attempt made, so far as I could learn, to raise them to a higher level or educate them. If, however, they are kindly treated and kept clean, I should feel much less regret for educational neglect than I should feel pained by the state of the patients and their accommodation in the parts of the establishment next described. Far be it from me to attribute to these Sisters of Charity any intentional unkindness or conscious neglect. I am willing to assume that they are actuated by good motives in undertaking the charge of the insane, that they are acute and intelligent, and that their administrative powers are highly respectable. **** It is the

farming out "of *human* beings by the Province to these or any other proprietors against which I venture to protest."

"It is impossible to convey an adequate idea of the condition of the patients confined in the gallery, in the roof, and in the basement of this Asylum. They constitute the refractory class—acute and chronic maniacs. They, and the accommodation which has so long been provided for them, must be seen to be fully realized. To any one accustomed to a well-ordered institution for the insane the spectacle is one of the most painful character. In the course of seven-and-thirty years I have visited a large number of asylums in Europe, but I have rarely, if ever, seen anything more depressing than the condition of the patients in those portions of the Asylum at Longue Pointe, to which I now refer. I saw in the highest story that in the roof, an ill-lighted corridor, in which sixty to seventy refractory men were crowded together; some were walking about, but most were sitting on benches against the wall or in chairs fixed to the floor, the occupants being secured to these restraint-chairs by straps. Of those seated on the benches or pacing the gallery, a considerable number were restrained by handcuffs attached to a belt, some of the cuffs being the ordinary iron ones used for prisoners, the others being leather. Restraint, I should say in passing, was not confined to the so-called refractory wards for instance, in a lower and quieter ward, a man was tightly secured by a straight waistcoat. Dr. Howard had him released, and he did not evince any indications of violence. It was said he would tear his clothes—a serious matter in an asylum conducted on the contract system! The walls and floor of the corridor in the roof were absolutely bare. But if the condition of the corridor and the patients presented a melancholy sight, what can be said of the adjoining cells in which they sleep and are secluded by day? They are situated between the corridor and a narrow passage lighted by windows in the roof. Over each door is an opening the same length as the top of the door, and 3 to 4 inches in height, which can be closed or not as the attendant wishes. This aperture is, when open, *the only means* of lighting the cell. The door is secured by a bolt above and below, and by a padlock in the middle. In the door itself is a *guichet* or wicket, secured, when closed, by a button. When opened, a patient is just able to protrude the head. There is, as I have intimated, no window in the room, so that when the aperture over the door is closed it is absolutely dark. For ventilation, there is an opening in the wall opposite the door, which communicates above with the cupola; but whatever the communication may be with the outer air, the ventilation must be very imperfect. Indeed, I understood that the ventilation only comes into operation when the heating apparatus is in action. What the condition of these cells must be in hot weather, and after being occupied all night, and, in some instances, day and night, may be easily conceived. When the bolts of the door of the first cell which I saw opened were drawn back and the padlock removed, a man was seen crouching on a straw mattress rolled up in the corner of the room, a loose cloth at his feet, and he stark naked, rigorously restrained by handcuffs and belt. On being spoken to, he rose up, dazzled with the light, and looking pale and thin. The reason assigned for his seclusion and his manacles was the usual one, namely, 'he would tear his clothes if free.' The door being closed upon this unfortunate man, we heard sounds proceeding from neighboring cells, and saw some of their occupants. One, who was deaf and dumb as well as insane, and who is designated *'Phomme inconnu,'* was similarly manacled. In his cell there was not anything whatever for him to lie or sit upon but the bare floor. He was clothed. Some of the cells in this gallery were supplied with bedsteads, there being just room to stand between the wall and the bed. When there is no bedstead, a loose paliasse is laid on the floor. In reply to my enquiry, the Mother Superior informed me that it was frequently necessary to strap the patients down in their beds at night."

"Passing from this gallery, which I can only regard as a 'chamber of horrors,' we proceeded to the corresponding portion of the building on the female side. This was to me even more painful, for when, after seeing the women, who were crowded together in the gallery, on benches, and in fixed chairs, many of whom were restrained by various mechanical appliances, we went into the narrow passage between the cells and the outer wall, the frantic yells of the patients and the banging against the doors constituted a veritable pandemonium. The effect was heightened when the *guichets* in the doors were unbuttoned, and the heads of the inmates were protruded in a row, like

so many beasts, as far as they could reach. Into this human menagerie what ray of hope can ever enter? In one of the wards of the Asylum I observed on the walls a card, on which were inscribed words to the effect that in Divine Providence alone were men to place their hopes. The words seemed to me like a cruel irony. I should, indeed, regard the Angel of Death as the most merciful visitant these wretched beings could possibly welcome. The bolts and locks were removed in a few instances, and some of the women were seen to be confined by leathern muffs, solitary confinement not being sufficient. One of the best arguments in favor of restraint by camisole or muff is that the patient can walk about and need not be shut up in a room, but we see here, as is so often seen, that unnecessary mechanical restraint does not prevent recourse being had to seclusion. A cell, darkness, partial or total, a stifling atmosphere utter absence of any humanizing influence, absolute want of treatment, are but too often the attendants upon camisoles, instead of being dispensed with by their employment. When such a condition of things as that now described is witnessed, one cannot help appreciating, more than one has ever done before, the blessed reform in the treatment of the insane which was commenced in England and France in 1792, and the subsequent labors of Hill, Charlesworth and Conolly. But it is amazing to reflect that, although the superiority of the humane mode of treating the insane, inaugurated nearly a century ago, has been again and again demonstrated, and has been widely adopted throughout the civilized world, a colony of England, so remarkable for its progress and intelligence as Canada, can present such a spectacle as that I have so inadequately described as existing in the year of grace 1884, in the Montreal Asylum."

"Before leaving the Asylum, I visited the basement, and found some seventy-men and as many women in dark, low rooms. Their condition was very similar to that already described as existing in the topmost ward. A good many were restrained in one way or another, for what reason it was difficult to understand. Many were weak-minded, as well as supposed to be excitable. The patients sat on benches by the wall, the rooms being bare and dismal. A large number of beds were crowded together in a part of the basement contiguous to the room in which the patients were congregated, while there were single rooms or cells in which patients were secluded, to whom I spoke through the door. The herding together of these patients is pitiful to behold, and the condition of this nether region in the night must be bad in the extreme. I need not describe the separate rooms, as they are similar to those in the roof. The amount of restraint and seclusion resorted to is of course large, yet I was informed that it was very much less than formerly."

Writing of his visit to the Asylum at Beauport he also complains of the system of restraint followed there, and condemns many of the architectural arrangements of the building. He then says:

"But it is needless to describe in more detail an institution which, however willingly I may praise where praise is due, is so radically defective in structure and so fundamentally different from any well-conducted institution of the present day, in the matter of moral, to say nothing of medical, treatment, that no tinkering of the present system will ever meet the requirements of humanity and science. I regret to say thus. It is a thankless task for a visitor, courteously treated as I was, to criticize any institution which the officers permit him to inspect. But I write in the hope of helping, in however humble a way, to bring about a reform in the injurious practice of the State contracting with private individuals for the maintenance of its insane poor."

In this last sentence Dr. Tuke has struck the chord responsible for all of which he complains. There is no use for us to attempt to hide the matter now. This is not the first time that public attention has been called to this state of things, but as it came from persons residing here, it did not excite the public pulse. Now, without any exaggeration, throughout the entire civilized world, we are held up as being a Province most lamentably behind the age in the treatment of our insane. It is absolutely useless, and folly of the most senseless description, for any one to attempt to bring into this matter—as has been done by a few French newspapers—the fact that Dr. Tuke, being a Protestant, wrote with a view of injuring the nuns. There are but few Protestants in the present day who do not hold these estimable ladies in the very highest respect. But such an opinion is quite compatible with the belief that to farm out to them the insane poor is folly of the worst description. One can hardly imagine nearly, if not quite, one thousand insane,

huddled together in a building totally inadequate, according to Dr. Tuke, for such a number; all these really under the sole direction of a lady—the Superioress,—endowed with administrative ability possessed by but few—but totally destitute of that peculiar information so necessary for one at the head of an Insane Asylum. The medical attendance at Longue Pointe is also totally inadequate, and not of a description to receive public confidence. The visiting physician, Dr. Henry Howard, is not referred to by this statement, for his powers are not medical, but administrative. Place that gentleman in a position at the head of an Asylum, with supreme authority, and we are satisfied, from what we know of him, he would give us an asylum that would be an honor to our Province. We do, however, refer to Dr. Perreault. He is a physician doing a practice in the neighborhood, and is thoroughly qualified for general practice. But the day for a general practitioner to also practice as an alienist is passed. This gentleman should either devote his whole time to his insane patients, for which he should be adequately paid, or he should give up his appointment. To attend to one thousand patients, and give the time necessary for the study which such a position entails, is even more than one man can accomplish, so long as a day only counts twenty-four hours, and seven or eight hours of it are required for sleep. If this is not done, we cannot but express the opinion, that the medical attendance will be unsatisfactory. Indeed such an Institution requires at least one medical superintendent with at least three medical assistants. The system is the cause of all the trouble—we farm out our insane poor. We do not know of any other country that does. We must make a change—humanity and the good name of our Province call aloud for reform. We know there are difficulties in the way; a contract exists which has ten years to run, but during that time much might be done to improve the condition of things. An editorial article is not the place in which to suggest these, but, if our Government has not the money with which to purchase the two Asylums, take them under their own management, and compensate the sisters for loss, then it should find the means for a medical commission. This commission would be able to make suggestions, the adoption of which would perhaps make the farming system at least endurable till the time the contract expires. Then beyond a doubt, we should wipe out the blot which now attaches to our fair Province of Quebec. To accomplish this, the Government will require the support of the entire population. So far as the Medical Profession is concerned, we believe it can rely upon receiving it.

THE LYNAM CASE.

What is now known as the Lynam case has attracted a very large amount of attention not only in the Dominion but in the United States. The details of it are, in brief, as follows:—Mrs. Lynam, living with her husband and children in the city of Montreal, was by the former considered to be of unsound mind and so violent that he believed his life to be in danger. Dr. Henry Howard, visiting Physician to the Longue Pointe Lunatic Asylum, was called upon to examine her, and on his certificate she became an inmate of that Institution. This was a little over two years ago. There she has remained ever since—most, if not all, of the time being confined in the refractory department. Mr. Alfred Perry, in whose employ she had at one time been, from a variety of circumstances became convinced that she was sane, and therefore wrongfully detained. Acting under a recent Act of the Quebec Legislature, he applied to Judge Jetté to have Mrs. Lynam produced in Court for the purpose of having her mental condition ajudicated upon. This order was granted, and in the interval of her appearance a number of medical men visited the Asylum to examine her condition. When proceedings began in open court, Drs. Trenholme, Wanless and Pickup (formerly medical resident at Beauport asylum), of Brockville, Ont., were examined on the part of Mr. Perry, and declared their belief in her sanity. Dr. Perrault of Longue Pointe, who is the medical man employed by the Sisters (Nuns) of the Asylum, as Attending Physician, also stated on oath that from the date of her admission up to the present time he had considered Mrs. Lynam a sane woman; that he had never made any report to the Government on the subject, although he had expressed his opinion to Dr. Henry Howard, who held the contrary view, and that he had not pressed the matter, although he still believed her sane. Dr. Howard testified that in his opinion she was insane, and at times, when excited, actually a dangerous lunatic, and in corroboration of his views produced Dr. George Ross, Professor of Clinical Medicine in McGill

University, and Dr. Cameron, at present Professor of Obstetrics in Bishop's College, but till this year, and for several years past Professor of Medical Jurisprudence in the same Medical Faculty. Both these gentlemen stated that on their first examination they were inclined to believe her sane. An interview being arranged between Mrs. Lynam and her husband, "which they saw, unseen and unknown," they both witnessed her in a state of great mental excitement, and from her conduct at this time they came to the conclusion she was insane. With such evidence before Judge Jetté, no wonder he felt bewildered, and he accordingly put Mrs. Lynam into the witness box, and, before a crowded court, gave her a most searching examination. It is but right to say that she stood the ordeal with wonderful calmness. At the same time those who believe in her insanity claim that, though calm, some of her evidence, as regards certain things she had overheard from the window of the Asylum, were nothing short of mental delusions. Here the case paused for a few weeks, when Judge Jetté announced that he felt himself unable to decide the question. He appointed Dr. Vallée, of Quebec, who occupies the position of Visiting Physician to the Beauport Asylum, to examine Mrs. Lynam, and at the same time suggested that the Quebec Cabinet should name two other experts to act with him. The Government at first objected to appointing the two other experts, but additional pressure was brought to bear, but their decision has yet been confirmed. In the meantime Mrs. Lynam remains an inmate of the Asylum. Thus the case stands at the time of our writing. We fully sympathise with Judge Jetté in the very difficult position in which he has been placed. We believe his determination to leave the case particularly in the hands of experts will, *if three experts* be named, give general satisfaction. Our experience does not enable us to analyse the evidence so as to express an opinion which would be of any value, so we content ourselves with a simple detail of the case. When the case has terminated we may express our views on certain facts which have been brought to light during the course of the investigation.

CARE OF THE INSANE.

THE ONTARIO AND QUEBEC SYSTEMS COMPARED —RESTRAINTS ALMOST DISUSED IN ONTARIO.

The following is a condensation of an interview obtained by a reporter of the Toronto *Globe* with Dr. W. F. O'Reilly, Inspector of Asylums and Prisons for Ontario, on the subject of the report of Dr. D. H. Tuke, editor of the *Journal of Medical Science* of London, Eng., and formerly Superintendent of the York Retreat for the Insane, on the asylums of Ontario and Quebec.

Dr. O'Reilly describes Dr. Tuke as a man of wide information in all matters regarding the insane and their management, and thought it quite impossible that he would misrepresent the case. He stated that the condition of matters existing in Quebec, particularly in regard to the system of restraint, could not occur in Ontario. Restraint there had been all but abolished. After a great deal of discussion, the opinion, a few years ago, began to be held by a considerable number that entire nonstraint might be successfully undertaken. On the side of restraint were ranked men of high standing and experience, but there were men equally high in standing who had put the non-restraint system in operation and had accomplished the most surprising and satisfactory results. When he personally had first entered on his official duties he had been in a general way acquainted with the restraint question, but he had since given the matter careful consideration, and was convinced that the non-restraint system was the best. He had also lost no opportunity of urging this view upon medical superintendents. Quoting from the report of Dr. Bucke, superintendent of the London Asylum, which he had just received, he showed that for fifteen months no mechanical restraint or seclusion had been used at that asylum, and that no sedative drugs had been administered. Dr. Bucke was as much surprised as any one at the success attained. The *morale* of the institution had also been revolutionized, and the basis of treatment in the London Asylum was said to be the employment of patients at whatever they were fitted for, thus securing distraction of the mind, and sleep. This treatment was found to have the result of making the patients more manageable and, so to speak, more civilized. In two years the attendance of those capable of good behavior at chapel had increased from an average of 250 to a regular attendance of over 400.

Dr. Bucke's report also states that the credit of the admirable results mentioned belong first to Dr. O'Reilly, who so persistently urged the non-restraint system upon his attention.

Dr. Metcalf, of the Kingston Asylum, Dr. O'Reilly said, reports that for nearly two years

there had not been an instance of mechanical restraint in that asylum, and the result had been such that they were not likely to go back to such treatment. Sedatives were sparingly given, however, though, instead of increasing by the reduction of mechanical restraint, they were falling off. He likewise based his hope for success in future on the employment of the patients. During the year prior to the abandoning of restraint out of a total of 430 under treatment 194 were employed, while during the past year out of a total of 581, 425 were employed.

To the farming-out system Dr. O'Rielly attributed the unsatisfactory state of affairs in the Quebec asylums. Contractors being paid so much per head for the care of the insane, it was natural for them to make as much money out of the contract as possible. In Ontario no official had any connection with asylums, directly or indirectly, and they were thus precluded from any chance of making money out of their position. The Government pays for evreything, and in the matter of food, clothing, etc., imposes no restrictions as to what shall be used, except that reasonable economy shall be used. The food furnished, while plain, is of the best quality.

In regard to cost of maintenance in Ontario as compared with Quebec, the Doctor said in Quebec the contractors received at the rate of $11 per month per patient, or $132 per year. The average cost per inmate in Ontario was $131, and they had thus an infinitely better system at an equally low rate. In the States the expenditure on lunatics is nearly double what it is here, the buildings and furnishings being much finer, and the attendants being higher paid. Their food, although no better, was in greater variety and more attractively served.

VICTORIA AND LAVAL.

Our readers will remember the difficulty which has for several years existed between those two rival medical schools. In the September number of last year we gave a synopsis of it, so need not occupy space by repeating it. It seemed to drag along as if it would never end,—now one side and then the other claiming that the victory was theirs. But the Apostolic Delegate to whom it was referred was not to be hurried. He seemed determined to make himself master of the situation before coming to a conclusion, and in this he was wise. That conclusion has, however, at last been reached, and we are pleased to say that it is favorable to Victoria. Her school is to continue, and her professors are to have the same control as heretofore at the Hotel Dieu. In a word, Victoria goes on as before. In this decision there is much which must give satisfaction to all in the profession, who know the history of this School of Medicine. Its birth and early life bear witness to the cordial friendship which existed then, and we believe exists to a great extent now, between the French and English members of the profession in Montreal. Its death would have made a breach between the French Medical Profession in this Province that in our opinion a century would not have healed. To have such a calamity averted is cause for much thankfulness, and when the irritation has been calmed down by time, we believe that the supporters of Laval will admit that the decision of the Apostolic Delegate was wise and just.

THE MONTREAL MEDICAL SCHOOLS.

The various medical schools in Montreal opened the first week of the present month, and, so far as we can gather, the attendance at all is about the same as last year. We do not look for much increase in the number attending the English schools, till the senior English medical school here learns that there is not always wisdom in monopolies. Toronto knows this well, and is profiting by it amazingly. We do not grudge that city the success which is attending her Medical schools—she acts fairly by all—and prosperity sits on the banner of each.

PHYSICAL EDUCATION.

A short time ago we noticed in the *Gazette* a letter from our esteemed *confrère*, Dr. Fenwick, reporting the highly satisfactory result of an examination he had made to ascertain the effect of gymnastic exercise in the case of eight members of Mr. Barnjum's Gymnasium. Dr. Fenwick adds the following postscript to the report above alluded to: "I must add to this my acknowledg-" ment of the usefulness of your system of calis. " thenics with children and young women, several " of whom I have sent to you to receive special " training in cases where special sets of muscles " had become weak or wasted through disease. " In several cases that I can call to mind during " the past few years the greatest benefit has been " derived from the system of instruction you have

"followed." This testimony is at once valuable and suggestive, as reminding us that in Mr. Barnjum we have a coadjutor of whose assistance we might oftener avail ourselves. In many instances medicine alone, or ordinary exercise (more often prescribed than followed), are inadequate to cure various forms of muscular debility or deformity and here the aid of one upon whom we can thoroughly depend for faithfully and intelligently carrying out a defined remedial course of exercise comes in most opportunely. There can be no doubt that rationally conducted and systematic exercise is a necessity for obtaining that full degree of healthy development which is, we regret to say rather the exception than the rule. Physical education, no less than mental education, should be begun in childhood and be carried on gradually and systematically. Were this fact more generally recognized, how much of suffering and deformity might be avoided. There is too great a tendency to cultivate the brain to the neglect of the body. This is a serious error, both should be developed equally. Better a trifle less learning and more health to enjoy and make use of it. It is undoubtedly true that medical men, in a general way, convey such idea to parents. Still there is a lamentable amount of apathy or ignorance prevailing in regard to this matter which calls for judicious and oft repeated counsel at the hands of those who are amongst the most trusted, if not always adequately valued, friends of those who turn to them for relief when sickness and suffering invade the home circle. We are urged to put this matter strongly because we know of several instances where weak and ailing children placed under Mr. Barnjum's care became strong and healthful. Montreal is exceptionally fortunate in possessing a first-class institution for physical education, conducted by an educated gentleman, and we sincerely hope that his opportunities for usefulness may be largely increased, as the public become more awake to the value of bodily training. This awakening may be materially hastened by medical men.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

On the 10th October the annual meeting of this Society was held in their very comfortable rooms in Phillips Square. The attendance was large, and perfect unanimity prevailed. The following were elected officers for the ensuing year:—*President*, Dr. Roddick; *1st Vice-President*, Dr. Alloway; *2nd Vice-President*, Dr. Trenholme; *Treasurer*, Dr. Molson (re-elected); *Secretary*, Dr. Gurd (re-elected); *Librarian*, Dr. Reed; *Publication Committee*, Drs. Cameron, George Ross, Kennedy and Bell; *Council*, Drs. George Ross, Kennedy and Roger. An able address was given by the retiring President, Dr. Roger. Dr. Osler was elected as honorary member, and it was decided to present him with an illuminated address of deep regret at his departure from Montreal.

RELATIVE DIASTASIC ACTIVITY OF MALT EXTRACTS.

Recognising that the diastasic activity of Malt Extract is probably its most valuable feature, the Maltine Manufacturing Company have taken pains, not only to perfect their preparation in this respect, but also to bring out the fact by indisputable testimony. This has been most effectually done in pamphlet now before us, carrying as, it does, testimony of the highest authorities in the world of chemistry in support of their claim to diastasic excellence. This element secured, no more reliable constructive is at command of the profession for treatment of wasting diseases, notably phthisis. No doubt the pamphlet referred to has been generally circulated amongst the profession, but if any have failed to secure copy they can do so by addressing post card to Mr. H. P. Gisborne, 10 Colborne street, Toronto.

Local and General.

CONDUCTED BY P. A. LAVER, M.D.

A branch of the London (Eng.) Society for Psychical Research has been started in Montreal, and would be pleased to hear of facts bearing upon the theory of the intercommunication of thought or consciousness without any visible medium. Commenting on the aims of this Society a Montreal paper gently chides the profession for not taking an interest in such matters, and predicts that when the study of psychology is more general among the doctors that they will be brought to see the error of their ways. I doubt it. If we are to take as samples of the stories from which the Society draws its inferences relative to spiritual

things those published lately in the Montreal *Witness*, psychical research will not prove very seductive to the average medical student.

Not only is it much more probable that in the majority of cases the circumstances related are merely coincidences than that they have any necessary connection, but the special plea of the spiritualist is only too evident in most of them.

I would suggest that the committee of organization bear in mind a certain essay of Professor W. K. Clifford ("Ethics of Belief") while estimating the value of the evidence given by our local story-tellers. The following sentences might serve as a beneficial corrective for some of the witnesses:

"In order that we may have the right to accept a man's testimony as grounds for believing what he says, we must have reasonable grounds for trusting his *veracity*, that he is really trying to speak the truth as far as he knows it; his *knowledge*, that he has had opportunities of knowing the truth about the matter; and his *judgment*, that he has made proper use of those opportunities in coming to the conclusions which he affirms." I would also seriously recommend as a text-book for this new class in science the lecture of Tyndall on "The Scientific Use of the Imagination."

Mr. Lawson Tait, in his admirable address before the C. M. A., speaks of the custom prevalent in his time of making the grand tour of continental schools of medicine, and he, in the warmth of his heart perhaps, expressed his belief that in the future the eyes of the searcher after medical truth would be turned westward rather than to European centres of education. Are we also not too prone to consult the wise men of the East in this year of grace? The types of disease that prevail here are essentially American. Such modifications of disease brought about by climatic and race differences may be small in most instances, but they should not be ignored, and I think it is unseemly in a profession that calls itself liberal to submit to this worship of German and French authority because it *is* German and French. Does the Sun of our Science rise on the Seine and set near the banks of the Spree?

A brilliant idea has at last come to the Board of Health of this city. Hitherto vaccination of the children of the poor has been done by five public vaccinators who received about $200 each per annum, from the Corporation.

There are, doubtless, some objections to this method, but on the whole the scheme has worked well. The men appointed did their work in the neighborhood where they lived, and their knowledge of the people and the limited area assigned to each gave them a fair chance of reaching all suitable cases. Now, however, it is proposed to replace these five men by another, an assistant medical health officer, who, in addition to other duties, will be expected to do the whole work of the five who are to be dismissed.

Every Montrealer knows how worn and threadbare is this old, old story. Ever since the days of Dr. Carpenter (and his enquiry into the cause of the high infantile death-rate prevailing in this city) all sorts of testimony, lay and professional, have been given, and all kinds of remedies suggested. If the city authorities will give us a properly regulated Health Office, and if the citizens will support them in carrying and supporting effective health by-laws much may be done. Then let private enterprise supply a summer hospital or sanitarium on some accessible spot near the city and Montreal will no longer be obliged to bear the onus of being one of the most unhealthy cities (*quoad* its children) on the continent.

Yet, in spite of the "dry light" of science, the fog of sentiment occasionally obscures the mental horizon of even the medical *litterateur*.

Some time ago the critic of the *Canada Medical and Surgical Journal* was really quite shocked at the materialistic views of a writer which he was reviewing. A medical journal is hardly the place to discuss questions of religion, but it seems rather late in the day for one doctor to get lachrymose over the dreadful heterodoxy of another. I am sure we all agree with Dr. Holmes that the truth is wanting in the Latin proverb, "*Ubi tres medici ibi duo athei*," but something may be said in support of even materialism.

At the banquet given by the Profession in Montreal to the members of the Canada Medical Association Consul General Stearns gave one of those happy speeches for which he is so generally and so justly celebrated.

His reference to the dangers and drawbacks of specialism was well received by the assemblage,

and I am sure many a medical man there felt with him that the usefulness and the influence of the profession as exhibited by the "good-all-round" doctor—"the doctor that is good for everything"—are in considerable danger.

His belief that if the public are to be directed to this man for a nasal catarrh, to that one if their digestive apparatus suffers, and to the other doctor if they have a cough a great stimulus will be given to the already alarming trade in quack medicines. There can be no doubt but that certain departments of medicine and surgery will, in the large cities of populous countries, be given over to specialists, but I do not see how we can afford much of that sort of thing in a new and sparsely-settled country like Canada. More than that, I believe that, if persevered in, and if it receive the support of any large section of the profession, a few men will reap a fat harvest to the detriment of the general good.

As Dr. Sullivan (in his Presidential Address, C. M. A.) and others have pointed out, the death-rate of this province is needlessly high. This modern holocaust mainly takes the shape of an annual "slaughter of the innocents" in the cities. Dirty houses, crowded together as tenement rows, with foul-smelling drains and small yards—many of them the common receptacle of garbage and domestic rubbish for half a dozen families—all these make personal cleanliness difficult or impossible. Add to these causes the heat and discomfort of our long, hot summer days and the close stuffy atmosphere of small stove-heated rooms and the source of infantile mortality in Montreal is explained.

There is one exasperating form of Teutonomania which shows itself in the proneness of writers of a certain class to offer (and I suspect of their readers to accept without question) the unsupported dictum of some man with a German name.

And then, if it be desired to clinch the argument, let the original text be given. This is also very effective and awe-inspiring in a paper read before some Medical Society. As not more than five per cent. of the magazine readers and of the medical audience have a faint idea of what the writer is talking about in the particular instance the value of the whole argument is of course very much enhanced!

Far be it from me to undervalue the debt which we all owe to Virchow, Koch, Erb, Ziegler, Ziemmsen, and to a host of others whose names are to us as household words, but it cannot be denied that it is not to Germany any more than to France, England, or even to despised America, that we have to look for *permanent* additions to our storehouse of medical and surgical knowledge.

"Natur hat weder Kern noch Schale
Alles ist sie mit einem Male,"

says Goethe, and the observant *physician* shall not fail to discover the truths of nature whatever language he may speak or wherever he may live.

It is greatly to be regretted, for the honor of Canadian Surgery, that Mr. Lawson Tait was on board the Quebec boat when the young woman cut her brachial artery. I wonder if he considers the two doctors (one French, the other English) who vainly tried to ligate the severed vessel to be fair samples of the men to whom a too-confiding public entrust their valuable lives. Let us, however, not be too censorious, it may be that the gentlemen in question were not of those who pay *particular* attention to surgery—of the blood vessels.

What the Health Department wants, to begin with, is a respected and responsible medical chief. If the City Council would pay a man a respectable salary they would get the worth of their money in educated experience, the sort of thing needed to carry out intelligently and effectively *any* scheme of sanitary reform. As it is, the officers and employees of the Health office are at loggerheads; the work of the Department is done in a perfunctory and spasmodic fashion, and the public health suffers.

This reminds me of the story wherein a newly-fledged M.D. determines to make a specialist of himself, and in looking round for some unoccupied field of labor comes to the conclusion that the only ground left him for pre-emption was the scar caused by the wound which remained when the cord dropped off. He therefore announced that he would in future "pay special attention to diseases of and injuries to the umbilicus!"

September 30, 1884.

PERSONAL.

Dr. Wesley Mills' is delivering the course on Physiology and Pathology this Session at McGill College.

Dr. Molson, of Montreal, we understand, has no intention of removing to Philadelphia, as stated last month by the *Canadian Practitioner*.

Dr. John J. Gardner, late house surgeon of the Montreal General Hospital, has been appointed Demonstrator of Anatomy in the Medical Faculty of Bishop's College.

The Glee Club of the Medical Students of Bishop's College, assisted by a few amateurs, gave a concert in Farnham, Que., on the 31st of October, in aid of a church fund.

The many friends of Dr. J. Leslie Foley, late Professor of Anatomy in Bishop's College, will regret to learn that his illness has become so serious as to necessitate his entirely giving up practice.

Dr. Osler, late Professor of the Institutes of Medicine in and Registrar of the Medical Faculty of McGill University has been elected Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, rendered vacant by the transference of Professor Pepper to the chair of Practice of Medicine. Dr. Osler has accepted the position, and left Montreal on the 7th of October, to enter upon his duties. Previous to his departure the Medical Profession of Montreal entertained him at a farewell dinner at the Windsor hotel. All the Medical Schools in Montreal were represented at the dinner, and warm expressions of regret at Dr. Osler's departure were uttered by the various speakers. The line of teaching which Dr. Osler has assumed is somewhat new to him. His friends, however, hope that he may be as successful a teacher of Practical Medicine as he has been of Physiology and Pathology. Since his arrival in Philadelphia, Dr. Osler has been warmly welcomed by his new colleagues. His departure is a serious loss to the Medical Faculty of McGill, of which he was a very active member, and it will create a vacancy on the attending staff of the Montreal General Hospital.

THE LATE DR. GEORGE W. NELSON.

Dr. Stern, of Panama, writing to us, says:

"The death of Dr. George W. Nelson, late Resident Surgeon to the Central Hospitals of the Panama Canal Company, has removed from the ranks of the Medical Profession a bright and promising ornament. During the brief period that the Canal Company had the benefit of his services he proved himself an earnest worker, painstaking and observant. He had made valuable use of his time, and had he been spared would have manifested what good sound medical training, backed by industry and careful observation in a large field of practice, can effect. He has died 'with all his music in him' at the early age of 26 years.

His death took place in California, whither he had gone in the hope of recovering his health. He succumbed to his malady, tubercular phthisis, on the 2nd of October.

In the but too few years allotted to him on earth he hath done his work faithfully and well; and the longest life is all too short if this be no achieved."

The Panama *Star* and *Herald* says:—

"The late Doctor Nelson came of a family of doctors, he being the ninth in direct descent. He was the second son of the late Dr. Horace Nelson, of Montreal. With his brothers, he was a student of the Medical Faculty of Bishop's College, Montreal, graduating in 1879, with honors in his primary and final years, taking the final prize. Still being a minor he had to wait nearly a year for his diploma, when he became a member of the College of Physicians and Surgeons of the Province of Quebec. While waiting for his degree he practiced as Assistant to Dr. H. Cotton, at Mount Forest, Ontario. Later, he established a successful practice at Marbleton, P.Q. The drudgery of the life told severely on his health, and the hereditary enemy of his family for many generations singled him out. In December, 1881, he passed through this city on his way to California, in search of health. He remained there a year, returning to this city in December, 1882. He practised with his brother, Dr. Wolfred Nelson, until March, 1883, when the Canal Company offered him an appointment. He filled the latter ably, and amassed a valuable collection of clinical notes, particularly on the fevers of the country. A series of meteorological observations conducted by him will throw some valuable light on the influence of atmospheric conditions on yellow fever. They will be published for the benefit of the profession that he loved so well. In April

last, in rapidly failing heath, he sailed for California, proceeding to Tucson, Arizona. He returned to Santa Barbara, accompanied by his brother, Dr. Francis J. Nelson, where his career closed at the early age of 26 years.

REVIEWS.

The Student's Manual of Chemistry. By R. A. WITTHAM, A.M., M.D., Professor of Chemistry in the University of Buffalo. New York, William Wood & Co.

This is just such a book as is needed by the class for which it is intended. General works on the subject of chemistry contain too much which is of little importance to medical students. In the work now before us special attention is paid to these portions of chemistry which are of direct interest to medical practitioners, while as far as possible those portions are excluded which are of purely technological interest. Descriptions of processes of manufacture are therefore very briefly dwelt upon, while chemical physiology and the chemistry of hygiene, therapeutics and toxicology, are fully explained. We strongly recommend this work to the attention of all teachers of chemistry in our medical school. No better text book can be selected.

The Physician's Visiting List. P. S. Blakiston, Publishers, Philadelphia.

This, the first visiting list in the field, maintains its reputation, in spite of many rivals. We cannot say more to recommend its use to our readers. It is prepared for 25, 50, 75 and 100 patients weekly.

AMERICAN JOURNAL OF OPHTHALMOLOGY.

This journal—the only one published on this continent in the interest of this specialty, is issued at St. Louis, Mo. It contains a large amount of interesting matter, and should receive the support of those for whose benefit it is published.

GLYCERINE AS A REMEDY IN INDIGESTION.

The editor of the *Medical Index* has found the exhibition of glycerine to be attended with satisfactory results in two forms of indigestion, particularly: 1st, in that form of irritative dyspepsia, which is the common result of rapid eating and imperfect mastication. The usual symptom in such cases is distress coming on half-an-hour or an hour after meals. There is also duodenal catarrh and dyspepsia, with perhaps, slight jaundice and other symptoms, referable to, and explained by, the irritated mucous membrane of the stomach and duodenum. The indications in such cases are well-defined. The food must be prevented from undergoing mischievous chemical changes before it can be acted upon by the enfeebled digestive organs, and a remedy must be given, which shall exert a local soothing effect upon the irritated mucous surface. Glycerine, theoretically, from its preserving and emollient properties, fulfils these indications, and in practice our contemporary has not been disappointed in its use. A somewhat similar condition to the above is met with among children shortly after birth, after a trial of feeding them solid food has been followed by colic and soothing syrup. In such cases the child is apt to have greenish discharges, occasionally specked with blood. Glycerine will be found an admirable remedy in these cases.

INTESTINAL OBSTRUCTION FROM CHARCOAL.

A patient who was lately under my care, suffering from chronic obstruction in the intestinal canal, probably in the descending colon, took, on his own account, freely of charcoal powder, often a drachm a day, to relieve flatulency. The result was an all but fatal obstruction. Fortunately, under the use of enemata, coupled with persistent but gentle abdominal friction, relief was obtained, although stercoraceous vomiting once occurred. The excretions causing the obstruction were coated with carbon, and portions of carbon also passed in the free state. This is the second case in my practice in which charcoal powder has caused intestinal obstruction.—*Asclepiad, October*, 1884.

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Original Communications.

NOTES OF SIX CASES OF REMOVAL OF THE OVARIES AND FALLOPIAN TUBES.

By E. H. TRENHOLME, M.A., M.D., B.C.L.

Professor of Gynecology, Medical Faculty, University of Bishops' College.

The importance of the subject of removal of the uterine appendages leads me to briefly report six cases in which the operation was performed for the relief of pelvic disease and suffering, where no other form of treatment had been found satisfactory and where the condition of the patients was such that not one of them had any future for which to live.—I may say that while the symptoms varied with each case, yet the general features were of a common character, and all more or less directly referable to the monthly molimen. These six operations were made during the year ending first of April, 1884, so that $1\frac{1}{2}$ year has elapsed since the first of this series occurred and half a year since the last. This delay has been caused by a desire to have the effects of the operation made known, so as to have some fair idea of what changes and benefits, or otherwise, had resulted. The mere report of such operations, even when recovery results, affords but little information for those who wish to study the subject; while it is manifestly unfair to return a case as cured simply because the patient did not die from the operation itself. I consider this operation as in some sense yet upon trial: the data for its performance and the exact class of cases where we can safely predict a successful issue are not sufficiently established. If this contribution helps toward this result my chief object will be gained. It is only by the report of such cases and unsparing critical discussion that the truth becomes apparent; and here, as well as in all cases, what we want is the truth, the whole truth, and nothing but the truth. As one of those who has devoted some attention to the treatment of diseases of women I fancy my own experience in dealing with some of these cases is similar to that of many others. The ordinary uterine displacements, the so-called ulcerations of the os uteri, with induration and enlargement, and even uterine myoma are varieties of disease easily recognized, and for the most part not difficult of cure. But all is different when disease of the appendages co-exist with that of the body of the organ itself. Here our caustics, alteratives, pessaries, and every form of medicinal treatment, fall short of effecting any special benefit to the poor sufferer, whose days are shortened by the misery of her life.

This desperate state of hopeless despair so pressed itself upon me that some ten years ago I ventured to tread in a new path, in the hope of affording relief to suffering and to the saving life. The fact that in this class of cases the activity of the sexual functions was the exciting cause of the intense suffering, whether accompanied by severe hemorrhages or interference with the organic functions of life, led me to resort to the removal of the uterine appendages for their relief and cure.

The sphere of this operation is being enlarged to embrace certain forms of mania. Some time ago Dr. Goodell reported several cases where it had been resorted to for mental derangement with marked benefit.

One of the following cases was of this character, and the result has been most gratifying.—The

patient is remarkably improved, and is sensible of the great change that has resulted from the operation. I have had several letters from her, all of which manifest a good mental condition. There is still much to be done in this line, and I am anxious to see what may be achieved in the way of castration of insane male subjects. The well-known effect of the operation on animals leads me to hope that very many cases of mania might be so far relieved of their violent character, as to permit of their being retained at home, and thus lighten the dreary monotony of an asylum life. Such a case as I refer to, came under my observation a short time ago, but, unfortunately, too late to allow of the performance of the operation before the patient was removed to Longue Pointe Asylum. Without further remarks I now give a brief report of the case with the after-results of the operation, so far as known, up to the present time :

Case 1.—Miss S., æt 34. Canadian, spare habit but well developed, and, except for disorders of menstruation, healthy. For many years patient has suffered during menstruation, but for the past year has been a confirmed invalid, seldom able to leave the house. I could not get any information from her former medical attendant, inasmuch as she had been under twelve doctors before she fell into my hands.

Upon examination I found the uterus low down in the pelvis and retroverted—the condition of the os was normal, the depth of cavity $5\frac{1}{2}$ centimetres, and the organ freely moveable. On the right side found a small growth which was supposed to be either an ovarian or tubular cyst. As the uterine displacement with all its accompanying distress could only be treated palliatively, and as such treatment could not possibly offer any future to the patient worth living for, the removal of the uterine appendages was advised.

Operation.—On 31st of March, 1883, assisted by Drs. Ross, Armstrong, Gardner, Young and Shepherd, I removed the ovaries and fallopian tubes. The abdomen was opened in the median line, below the umbilicus, to the extent of about 9. c. m. On the right side there was a cyst about the size of a goose egg =1 lb. The left ovary was enlarged and cystic, both tubes much congested and apparently the seat of inflammatory action. The external wound was closed by three deep silver sutures and five superficial horse hair sutures.

The after-treatment does not require special note, as the convalescence was rapid and the temperature almost normal throughout except on the second day when it rose up to 100.5 for a few hours. On the 12th day patient was able to be up in an easy chair. The only after-trouble encountered was small abscesses, due to the irritation of the silver sutures in the recti muscles, an occurrence which now, thanks to the suggestion of Dr. Goodell, need never occur.

This patient returned to her home in Ontario, and in less than three months after the operation was performing nearly all the work of a family of seven persons. Eighteen months have now passed, and though her general health was feeble for some months, and there was a good deal of pain and pelvic distress, on account of a too early resort to duties of life, yet on the first of this month (Nov.) she writes : "The great pain I suffered in the body is gone, am not troubled so much with my head and back, able to walk three or four miles a day, and gaining in flesh, and able to do *all* my own work, which has been very heavy for the last two months my mother was in Toronto for six weeks during the busy season and I did every thing myself. Were it not for the great pain of rheumatism I would be, comparatively speaking, *quite* well." This patient suffered a good deal, especially the first few months after the operation, from flashes of heat all over the surface of the body, followed by perspiration. This peculiarity has been noted in all the other cases now reported, but in some cases much less severe than in others.

Case 2.—Miss——, æt 32. Born in Quebec. Well-developed, healthy girl in every respect, except as to the organs of generation. Her menses have always been painful, and though for a number of years she led an active life between the menstrual epochs, yet for the last four or five years has been unable to walk or sit for any length of time on account of severe and constant pains in the pelvis. In fact, most of her time was passed on her couch, with her feet elevated, in which position alone she obtained relief.

The patient had been a sufferer from the time menstruation began, but it was only after the menses had been arrested by the use of cold water baths that her disease assumed a serious character. Before, during, and after menstruation the pains are severe, while the interval between these epochs permit of limited out-door exercise. These periods of comparative relief have been gradually diminishing, in fact are almost absent at the present

time. Very serious menorragia has greatly reduced the patient.

The uterus was found retroflexed and retroverted and both ovaries enlarged.

As medical treatment had failed to afford any relief, and the state of her health rendered her not only a great sufferer, but quite precluded the possibility of any active useful life, the removal of the uterine appendages was proposed, and the operation for this purpose performed on 21st June, 1883 (now 17 months).

The operation was made in my usual way, except that I used silk ligatures in place of my favorite hemp.

The removal of the ovaries and tubes was not very difficult, but the low state of the patient was followed by a tedious and anxious recovery. The wound healed slowly and quite 'a quantity of pus escaped from the lower part of the incision, which healed up by granulation. The pelvic pains continued with much severity for months afterward, and does so still suffer, though to a much less severe degree. The chief advantage gained by the operation is the cessation of the menorrhagia, which has allowed the patient to gain in flesh and strength, and to walk about in a way not possible for several years past. The benefits hoped for have been interfered with by hernia of the bowels at the lower part of the wound, where lack of union permits of painful protrusion. This complication was not serious some six months ago, but I learn that it is now giving a great deal of trouble. The patient is now able to see to household duties, and leads a somewhat active life, while at the same time her restoration to health has not been as full and complete as I had anticipated.

Case 3.—Miss ——, St. Catharines, Ont.

This patient was operated upon at the request of Dr. Goodman and the medical staff of the Hospital. She is a well-developed, healthy-looking girl of about 28 years of age. Has suffered for several years with menstrual disorders and pains in the pelvis. As she had received no benefit by treatment, and being a poor girl, who was obliged to work for her living, which she was unable to do, the ovaries and tubes were removed in the usual way on 2nd July, 1883. The recovery was rapid and perfect. She has returned to the duties of her station, and when last heard from was in the possession of very good health.

Case 4.—Miss M., Toronto æt 23. Pale, delicate, slight-built, nervous girl. Has been a sufferer since menstruation began, but of late is subject to extreme distress at each menstrual period. The pains are most severe in the region of the ovaries and down the legs. The uterus is indurated, tender and low down in the pelvis. Both ovaries enlarged and tender. On 28th August, the uterine appendages were removed in my usual way, and the patient made a complete and rapid recovery.

The subsequent history of this case is most satisfactory, so far as the results of the operation are concerned. All pelvic suffering disappeared, and within a few months she was able to walk several miles, and skate for hours without exhaustion. Being of a tubercular diathesis I have lately heard she is dying from pulmonary phthisis.

Case 5.—Miss C., Vankleek Hill, Ont. Spare, tall, healthy-looking girl, æt 32. Has always suffered from her menses, but the flow was regular as to time and amount; the menstrual distress gradually increased till about six months ago, when the pains diminished in degree, but was accompanied by symptoms of mental derangement. Since this time she is despondent and melancholy, with a suicidal tendency. On one occasion she attempted to take her own life and from that time she was under constant supervision up to the date of her coming under my care. The ovaries were found to be enlarged and tender. The operation for the removal of the uterine appendages was made in my usual way on 22 nd March, 1884. The recovery and subsequent history of this patient has been most satisfactory, and her maniacal symptoms have not again manifested themselves. She has not needed any supervision, and enjoyes better health than for years past, and is now able to help in the house work of her home on the farm. I have had several letters which show a marked improvement in her mental condition, and she now seems to realize the mental disturbances she has passed through before the operation.

Case 6.—Miss I., æt 21, Montreal. Patient is a medium-sized, well-developed girl. Has suffered since menstruation began, some seven years ago. Pain in the region of both ovaries constantly present, but at the time of the flow is most severe. On examination both ovaries are found to be enlarged and tender. Uterus also much congested and heavy. As the girl was in dependent circumstances and unable to earn her own

living, and as no local or general treatment availed to afford more than very temporary relief, the removal of the ovaries was performed 5th April, 1884. There was nothing special to note, so far as the state of the parts removed or the nature of the operation, but the patient proved a most troublesome one, and made the slowest and most unsatisfactory recovery of all the cases I ever had. The incision was hardly 5 c. in. long, but it took quite two months to secure union. The result of the operation, however, has been all that could be desired. The pelvic distress has entirely disappeared, the girl's strength and spirits have returned and she is now engaged in domestic service. I may say that upon two or three occasions, about the time of her menstrual periods, she has had slight hemorrhages lasting about a quarter of an hour, the total amount lost being about 3i. upon each occasion. Montreal November, 1884.

GYNÆCOLOGICAL REPORT.

By E. H. Trenholme, M.D., Professor of Gynæcology, Bishop's College.

Sponge tents.—The need of safe and efficient means of dilating the cervical canal of the uterus is of such importance that practical hints as to the preparation and easy introduction of sponge tents are thankfully received. Some time ago Dr. Albert Smith, in a paper upon the subject, brought out the following points: 1st. That sponge tents made by pressing a flat piece of sponge saturated with wax between two marble slabs, expanded only one way and were of little service. 2nd. That the Sims' method of compressing a sponge saturated with a strong solution of gum arabic, impaled upon a wire compressed with cord, and then dried and smoothed, did not afford such a good tent as one made after his own method, which is as follows: 3rd. Wind a cylindrical piece of sponge *saturated with water only*, and without any stylet, with a piece of fishing line to which a six-pound weight is attached. This compresses it thoroughly, and its form is easily given by the fingers during the process of rolling—the surface can be smoothed by sandpaper. The tent should be of a uniform size from end to end, otherwise the cervical canal will not be equally dilated throughout. The tent should be made of fine strong sponge, and the use of medicating agents avoided, as they set the sponge and render their removal difficult. The tent should be straight and rapidly introduced into the canal of the neck and uterus. It should be coated with soap and fine salicylic powder rubbed in over the surface, so as to form a disinfecting paste, which allows of its being retained 48 hours without giving rise to any unpleasant odor. A strong compressing forceps of a proper shape is used to place it in situ, and the injection of a little warm water renders its retention secure in a couple of moments. If it should cause pain an opium suppository can be resorted to for its relief.

Time of removal.—This is a very important point, as, if it is removed at the end of 24 hours, it will cause hemorrhage, on account of the spongioles which have become imbedded in the mucous membrane dragging away the entangled tissue and thus leave a raw surface. The uterus also up to this time possesses its contractive power, while after 48 hours it loses it, all pain has ceased, and the removal of the tent is easily effected; and if a second tent is necessary it may be introduced immediately after washing out the cavity of the uterus.

Among the advantages claimed for the sponge tent are slowness of dilatation—not slowness of expansibility. It has, also, a disintegrating power over morbid tissue, causing them to slough off after dilatation has destroyed their vitality. Sponge tents will not slip out as do laminaria, and they also permit of the escape of fluids through their pores.

Thus the sponge tent is not only used as a means of exploration, but also as a valuable remedial agent, as before stated, and by its stimulating effect upon the tissues causes decrease of size in cases of chronic metritis and hyperplasia. They are often of great service in cases of uterine hemorrhage due to granulations of the mucous membrane—their action destroying the fungoid growths and thus curing the patient. In some case pediculated fibroids have been destroyed and removed by the finger without much trouble.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Sept. 26, 1884.

T. A. Rodger, M.D., President, in the Chair.

Enlargement of the Spleen.—Dr. Armstrong exhibited a boy 11 years of age, whose spleen

extended a couple of inches below the umbilicus. Enlargement dated from an attack of typhoid fever three years ago. The lad's mother says that on three occasions he has had attacks of unconsciousness, followed by paralysis of one side, and lasting a few days. There is a diminution of red-blood corpuscles and an increase of white. Improvement in general health had followed the use of Liq. Arsenicalis, and for a time the spleen became smaller.

Dr. WILKINS said he had attended the boy off and on for years. He was not sure if what he took to be an attack of typhoid were that, as six or seven months after the boy had a feverish illness, when he became semi-comatose for several days. The spleen at times reached below the crista ilii. Had repeatedly examined the blood; usually there were but one-quarter the normal number of red-blood corpuscles. Found no absolute increase of white-blood corpuscles. For a time quinine caused the spleen to get smaller.

Traumatic Tetanus in a Woman aged 40.—Dr. WILKINS exhibited part of a foot, also a piece of sole leather, the size of half a pea, which had been driven up into the foot by standing on a nail. This occurred on Saturday. The following Wednesday she was seized with spasms, and removed to hospital on Thursday. It was thought that a piece of the nail might be in the soft tissues of the foot, but after careful examination by Dr. Roddick, nothing was found; but it was deemed wise to remove two toes and the parts for one inch back. On dissecting the piece removed, Dr. Wilkins found the bit of hard leather resting on a nerve filament. The symptoms were not much lessened by the operation, the patient dying thirty hours later, probably from asphyxia. Dr. Wilkins said if he had another similar case he would try excising the nerve higher up, say in the leg.

Dr. TRENHOLME said he had had a case very like this one, where a boy got a splinter of wood into his foot. The splinter was pulled out and the parts healed nicely, but in ten days tetanic spasms, followed, ending fatally. Dr. Trenholme found a very small bit of wood, surrounded by a drop of pus, in the foot. Dr. Fuller, who performed the *post-mortem*, traced the nerve from the wound to the base of the brain, and found it all inflamed. In the spine, the membranes, as well as the cord, were congested. Some of the fluid from the spinal canal was injected into a dog; paralysis followed, which lasted several days.

Dr. BELL said that he had seen several cases of traumatic tetanus in the hospital. A man was stabbed in the instep with a pitchfork, a bit of stocking was found at the end of the wound. Another case was that of a girl, who had run a nail into her heel. After death he dissected the parts, and found a sliver of iron resting against a nerve filament, which was swollen and œdematous. A third case was where a man was hurt from a fall on the buttocks; symptoms of a deep-seated suppuration ensued. The man died seven days after the injury. No *post-mortem* was allowed in this case. On theoretical grounds, Dr. Bell believed success might follow amputation and keeping the patient well under the influence of opium—in fact, pushing the opium as far as possible.

Dr. HENRY HOWARD hoped surgery would prove an aid in these cases, yet he doubted if it were possible. He related several cases which had been under his care—one being that of a son of the late Dr. Mount's, where tetanus followed a scratch on the buttock.

Uterine Myoma; Removal; Death from Exhaustion. Dr. WM. GARDNER exhibited the specimen, which was about the size of an orange. Patient, aged 52, had had severe hæmorrhages for four or five years. On examination, the above tumor was found, and, although very weak, it was deemed wise to remove it, which was done piecemeal. Patient did well for 36 hours, dying from exhaustion 56 hours after the operation. The discharges were never at any time fœtid. The womb was irrigated repeatedly, and at times continuously, by means of the double irrigation tubes. Dr. Browne assisted at the operation. Dr. Gardner said it was well known that uterine fibroids frequently kept up menstruation for long after the usual time, and were often the cause of the menorrhagias seen at the menopause. Profuse menstruation at the climacteric is not normal, and should be followed by a uterine examination in order to prevent operations being performed upon women already much weakened.

Dr. TRENHOLME thinks one is not warranted to explore the uterus by the occurrence at this period of menorrhagia alone. The question of operating for fibroids depends upon whether we

can control the hemorrhages till after the menopause or not.

Infant Feeding.—Dr. Blackader read a paper on this subject.

Dr. Alloway said that infants objected to milk digested with Pancreatic Extract on account of its bitterness. He also spoke of the benefits of using very fresh milk and the means used to obtain a regular supply, as seen in some cities in the old country, where she asses and goats are brought from door to door and the quantity required there and then milked.

Dr. Gurd asked if the observations made by other members agreed with his, viz., that artificially fed infants were, as a rule, larger than others.

Dr. Campbell agreed with Dr. Blackader that only the minimum of food found necessary should be given. He condemned the more convenient long-tubed bottles as being not only injurious in themselves for many reasons, but also as tending to make the mother less careful altogether of their infants. It was so easy to put the baby down with the bottle beside it, and "let it go as you please." His experience coincided with Dr. Gurd's, that artificially fed infants were larger and heavier than others. He (Dr. Campbell) found that stall-fed cows gave a more acid milk, and as many of our city cows were stall-fed, this would account for the reason why milk foods so often disagree.

Dr. Henry Howard said he had noticed that sometimes a mother's milk, whilst agreeing well with her own thriving child, when given another to nurse, the foster child would fail and pine away. When a student in Dublin, had often seen cows led from door to door to be milked for the customers.

Dr. Cameron said if the milk were only partially digested, the bitter taste would not be present. He uses gum water as a diluent for milk in preference to any starchy preparation, believing it less apt to sour. He spoke strongly against the milk supplied to the city, which sometimes for hours was churned in the waggons on their way from the country. Some cows were kept in the city, but these were mostly badly housed and fed. A patient of his, an infant on milk diet, three months old, was suddenly taken with choleraic symptoms. The milk was stopped and it got well; again it was put on the cow's milk, and the diarrhœa, etc., returned. Dr. Cameron went to the milkman's to seek for the cause of this, and found that the day the baby was first taken ill the cows had been fed with old cabbage leaves and turnip tops. He thought the health Officer ought to look after dairy inspection.

Dr. Wilkins said he had had very satisfactory results with the use of pancreatised milk; has always used Bengar's preparation of Pancreatine. At times he has found it necessary to rest the stomach, and so has used it per rectum. Anæmic mothers don't give the quality of milk required, though the quantity may be plentiful. Here he orders barley water, and the child to be nursed less frequently. He said that a drop or two of sour milk left in the tubes of a bottle was enough to set up lactic acid fermentation in a whole bottleful of milk.

Dr. Armstrong had found milk digested with Bengar's preparation very useful. On one occasion he fed a three months old infant for seven days entirely by the rectum, the child recovering from its illness.

Dr. Blackader said that the fresher the milk the better for infants. Boiled milk was much more difficult to digest than unboiled. He has noticed that bottle-fed infants were either very large and fat, or just the opposite.

Progress of Science.

COLDS.

We take the following from the *Lancet:*

Colds are chills, and chills are prolonged depressions of nerve-force, without the reaction which should occur immediately after the collapse. Nineteen persons out of twenty misuse this word "reaction," and the misuse involves more than an error, or confusion, of terms. There are *three* stages of every strong impression made on a living organism. First, the attack—in this case the chill; second, the pause, like a dead-point, during which the organism is depressed—that is, lying under the stunning effect of the attack; and third, the reaction. "reaction" cannot occur until after the dead-point, and the mistake commonly made is to speak of the stage of exhaustion or depression which follows any severe impression as the reaction, whereas it is precisely because no reaction occurs and the dead-point is prolonged that matters go amiss. The physiological, or perhaps we ought to say the pathological, process of a cold has been thus described: When the surface of the body or the air-passages are chilled by a draught, or by being drenched with rain and sitting in cold damp clothes, lying in damp sheets, and the like,

the mischievous impression is made, not on the skin itself or on the lining membrane of the air passages, but upon the vast network of minute nerve filaments which lies beneath these membranes, and connects the surfaces of the body—both external and internal—with the nerve-centres, which are the sources and foci of energy and power. These nerve centres receive, through the multitudinous branches of telegraph-like afferent nerves converging to them, a shock or staggering impression which for the moment paralyzes them; and during this paralysis or stupefaction the vaso-motor, or vessel-contracting centre, whose peculiar function it is to regulate the calibre of the blood-vessels, gets the upper hand, and these blood-vessels are contracted so that they carry less blood than usual. The smaller branches of the arterial system, which form a net-work immediately underneath the skin and give it its bright pink color, are so reduced in "bore" or calibre—as any elastic or compressible tube may be reduced—that the red blood does not flow through them, and the surface looks pallid. This is the first effect of "chill." Presently comes the recovery from this state, or the "reaction" as it is called, when the first effects of the shock have passed away and the centres begin to revive. Now occurs the critical moment. If the shock has been great, and the recovery is slow or imperfect, as often happens in a depressed or what is called a "delicate" state of the organism, the vaso-motor centre, which of course shares the general depression, though it is not the first to feel it and show it, will give way before the reaction is established; and then the heart, bounding in its recovery, pumps its blood into unduly yielding and unstrung vessels, and dilates them and local congestions or accumulations of blood may take place, while the absence of proper resistance excites the heart to tumultuous action, and the disturbances of fever and inflammation occur. It is a question of the balance in power between two parts of the nervous system, the general and the particular—the latter being the centre that regulates the calibre of the blood-vessels—and this practically resolves itself into a question of time. If the reaction of the general nervous system be quick, there is a rush of blood to the surface vessels, and due resistance being found, the heart quickens its pump-like action, and the sweat-glands are thrown into activity, so that perspiration ensues. If, on the other hand, the vaso-motor centre has participated seriously in the shock of the chill, the muscular coats of the vessels are not properly contracted; they have lost their tone. Then the blood propelled to the surface simply dilates the vessels, so that there are the redness and heat of "fever" or pyrexia, and the skin remains dry; there is rapid action of the heart, partly because there is less than the normal resistance to overcome, and partly because the vagus fails to exert its inhibitory action, and both the muscular structure of the heart and the respiratory centre are left uncontrolled, but the current of the blood moves slowly through the vessels, and the heart-wave is perceptible in the arterioles, and is present in the capillary area.

Coincident with these mechanial actions and reactions, involving departure from the healthy condition of the circulation, occur disturbances of the chemical processes of health, and consequently alterations in the nutritive relation of the various tissues of the organism and the blood. What then is a cold? Clearly it is a disturbance of the balance between the several parts of the nervous system, brought about by the shock of a sudden or prolonged exposure to the depressing effect of "chill"; although the same physiological results may be produced in the organism by the operation of any agent which is capable of giving the nervous system a similar shock, and thus creating the same kind of disturbance. Nature's provisions against the consequence of a "chill" and for the prevention of a "cold" are *sneezing* and *shivering*. A violent fit of sneezing often saves a chilled body the consequences of the nerve depression, or "shock," to which it had been subjected; and this shock may in its first impression be very limited in its area: for example, the small extent covered by a draught of cold air rushing through the crevice of a door or window. The nerve centres are aroused from their "collapse" by the commotion or explosive influence of the sneeze. If sneezing fails, nature will try a shiver, which acts mechanically in the same way. If this fails, the effects are likely to be very serious, and bad consequences may ensue. The popular notion reverses the order of events, and hence the saying, "If there is sneezing the cold will be slight, if there is shivering it will be grave;" whereas it is slight when sneezing suffices to recover the nervous system quickly from its depression, and grave when even strong shivering fails to do so. In case of chill, with threatened cold, sneezing may be produced by a pinch of snuff of any kind. This is how some of the vaunted "cures" of cold by snuff are brought about. Or brisk exercise may ward of the attack. The popular idea is that the circulation is restored by these remedies, but the true explanation is that the nervous system and centres are aroused. The first step towards an intelligent treatment of chill and cold is a scientific recognition of their nature.

PHARYNGITIS.

Two grains of the chloride of ammonium, combined with ten or fifteen minims of the tincture of cubebs, given every half hour, oftentimes controls acute pharyngitis and superficial inflammations of the other tissues about the throat. For inflammation of the throat dependent upon a gouty diathesis, add to this mixture ten minims of ammoniated tincture of guaiac, and administer every hour. (Dr. A. A. Smith.)—*Med. Record.*

FREQUENT AND PAINFUL URINATION.

A Clinical Lecture, delivered at the Long Island College Hospital.

By Alexander J. C. Skene, M.D.,
Professor of Gynecology in the Long Island Medical College; Surgeon to the Hospital.
(Reported by Edward Develin, M.D.)

Gentlemen: To-day I desire to call your attention to that condition of frequent and painful urination arising from certain disturbances and anatomical lesions of the sexual organs.

Case I.—Our first patient is thirty years of age, and has now been married eight months. Her health has always been fairly good until two months ago, when she began to suffer from frequent and painful urination. These annoying symptoms have continued ever since, and have also increased in severity. She states that in the morning and during the forenoon she is comparatively comfortable, and can retain her urine a reasonable length of time: but towards the afternoon the desire to urinate is frequent and urgent, and she has much pain in evacuating the bladder. These symptoms continue until night, and during the early part of the night she is compelled to rise several times and relieve her bladder; but after she has once fallen asleep she remains quiet until awaking in the morning at her usual time for rising.

Now the fact that she is able, while asleep, to retain her urine until the bladder is distended to an average capacity, is an indication that the trouble does not involve the entire bladder, but that it is limited to the urethra, and, perhaps, the neck of the bladder. If she had a general cystitis, the probabilities are that she would not be able to hold even an average quantity of water in the bladder at any time. We cannot, however, be sure as to the extent to which the bladder is involved without an examination of the urine, but it is fair to suppose, judging from her symptoms, that the trouble is limited to the urethra, and probably the neck of the bladder to a slight extent. It is a curious fact in her history that during the latter part of the night and during the forenoon she is comparatively comfortable, but that her symptoms become aggravated in the afternoon and continue during the early part of the night. This may be due to one of two causes.

First: It may be due to the fact that the irritation subsides after lying in bed for a time, and does not return until she has been about for several hours during the early part of the day. The fact of her being upon her feet and maintaining the erect position, naturally brings more pressure to bear upon the neck of the bladder, and would thus aggravate an already existing irritation, and give rise to frequent urination, which continues until she again seeks relief by assuming the recumbent position in bed for a time. This certainly is one of the causes for this frequent urination in the later part of the day.

Secondly: There is a cause which gives rise to the same peculiarity of clinical history, and that is *malarial poisoning*. A patient suffering from malaria quite frequently has irritability of the bladder, indicated by frequent and painful urination, these symptoms being always most marked in the afternoon and evening. In this case, however, there is no indication of malarial trouble: so that the peculiarity of her history is no doubt due to the erect position maintained during the early part of the day.

Regarding the primary cause of her trouble, that is not quite so clear; there is no history of any gonorrheal inflammation which could have affected the urethra or bladder, as it sometimes does; neither has she any uterine or pelvic disease which would directly or indirectly affect her bladder. It is barely possible that it arises from the change in her social relations: having married late in life—some eight months ago—it is just possible that her family relations may have produced an irritation of the urethra and base of the bladder, which, when once established, is very liable to persist, if not relieved by treatment. Having an opportunity of examining this patient's urethra and the neck of the bladder, the probability is that we shall find a hyperæmic condition, and perhaps some tendency to ulceration of these parts, but of that we cannot speak positively; as the examination has not yet been made, nor shall we trouble her with such examination, until we see if we can relieve her by treatment.

In the treatment of this case we will render the urine as bland and non-irritating as possible, by permitting her to drink freely of the alkaline mineral waters—Vichy for instance—and, in case she cannot procure that, we will order the acetate of potash. At the same time I will give here a favorite prescription in these cases:

℞.—Fl. Ex. Buchu, ... ʒij.
Tinct. Conium, ... ʒj.
Sig. ʒ j half an hour before meals.

If this fail to give her relief we will then employ injections of sulphate of zinc, half a grain to the ounce of water, with the addition of a drachm of the fluid extract of hydrastis canadensis. In using this local application we will employ a syringe with rather a large nozzle, which is to be introduced just within the meatus, then slowly and carefully inject the mixture, so as to force it along the urethra into the bladder; being careful to have the bladder emptied previously. By adopting this plan we are sure of bringing the remedy in contact with the entire mucous membrane of the urethra. We will also request her to abstain from coition, as that may be the cause of her trouble.

Case II.—I have here a very interesting case, brought to me by Dr. Stewart. This lady is forty-five years of age, unmarried. She gives us the following history: Up to six weeks ago she menstruated regularly every four weeks; since four weeks ago she has menstruated three times, she is therefore suffering from menorrhagia. She has great pain in the back and supra-pubic region,

with frequent and painful urination; altogether, suffering extremely, she says. I am now making but very little pressure upon the abdomen, and yet she complains very much. Upon examination I find an extremely interesting pathological condition here. Now bear in mind the prominent symptoms: there are intense backache and pain in the supra-pubic region, with an abnormal condition of the menstruation, and a frequent desire to urinate. Dr. Stewart, in carefully examining the condition of the sexual organs discovered conditions which did not altogether coincide with her history as given by herself. He found the uterus large and well developed, with an os externum which looked as if it had seen service; the same also with the perineum. Upon being questioned very closely, or, as they say in law practice, "cross-examined," she admitted that she had had a child five years ago, and had been also operated on for amenorrhœa.

This gives us a clue as to the cause of the present condition of things which we have here. We find the uterus is large and the fundus is pointing towards the upper part of the symphysis pubis, the os looking towards the hollow of the sacrum; the body of the uterus is therefore pressing upon the bladder and crowding it downward—a condition which is sufficient to account for this frequent urination. The uterus is anteverted, and the prominent symptom is the functional disturbance of the bladder, due, no doubt, to the displacement. I here show you a specimen of her urine. We often have symptoms of cystitis without cystitis being established. In this case we have vesical tenesmus because of the pressure of the fundus uteri. A normal bladder will tolerate pressure for a time, but after a while it will incite this frequent urination; it is therefore a question whether or not we have cystitis here. You will observe in this urine that there is an abundant deposit of the phosphates; if this clear up upon the application of heat, and we find no products of inflammation under the microscope, we will simply say that this is a mechanical derangement of function.

There is, however, another unfortunate condition here, and that is, that while the uterus is anteverted it remains there in spite of all our efforts to restore it. It is anteverted and fixed in this position because of a former peritonitis. If she has been subjected to an operation for the relief of amenorrhœa, she has been in the way of having pelvic cellulitis or peritonitis, or both, and the evidence is that she has had one or both.

We have here, then, an incurable anteversion; all that we can do is to relieve the symptoms; we cannot remove the cause of her pain, backache, and vesical tenesmus; we can only modify these, while hoping that she will live long enough to pass the menopause, and be relieved by the final involution of the uterus. The plan of treatment will be to try and relieve her general condition. This urine shows her nervous system to be below par; when we have this brick-dust deposit, it is said to be a symptom that the waste of the tissues is in excess of the assimilation for their support. It is a fact of clergymen that the deposit of phosphates in the urine is greater upon Monday than any other day in the week, by reason of the using up of the nerve force on the preceding Sunday. It is possible that we may improve this woman's general health so that her system will be able to tolerate her local difficulty, and thus bear her suffering much better.

It is impossible to use a pessary in this case, as the uterus is fixed; part of her vesical irritation may be due to the fact that her old peritonitis involved the peritoneum covering the bladder, so that now it is impossible for that organ fully to distend. This peritonitis has probably extended in front of the broad ligaments, forming adhesions, and thus holds the bladder in a splint, so that it cannot extend; this may be another cause of her frequent urination. So that we have here two factors: the displaced uterus, and the thickening of the peritoneum upon the walls of the bladder, which prevent its distention. We can do little but apply the douche and paint the vaginal roof with iodine; we can also introduce a belladonna suppository if advisable. This, however, as I have told you, can only be palliative.

This case is an exceedingly important one, as those who are most prone to this condition are those who abuse the generative functions.

There is one thing more here, which however hardly comes under my Chair. We find above the umbilicus a marked pulsation, which may be an aneurism of the aorta, and which might possibly account for some of the abdominal pains.

Case III.—This patient is twenty-six years of age, and she informs me that she first commenced to menstruate when she was eleven years of age. She has now been married seven months; her menstrual flow previous to marriage appeared every two weeks, but since that time she has menstruated once a month until within the last three months, when she has menstruated once in two weeks, as previous to her marriage. She now states that she has a frequent desire to urinate, and she is not relieved when she has passed water. She has vesical tenesmus, this is accompanied with some pain; her bowels are also constipated.

Now this is a very interesting history. First, abnormal menstruation, becoming normal after the change in her social relations, and then after a time again becoming abnormal. This is a marked violation of an essential law relating to menstruation, and the one which I dwell most upon in my didactic lectures, viz., that each individual should abide by the rule which she takes upon herself. If she start out in life to menstruate once in three weeks, that is normal for her, and she should continue to do so.

Now on examining this patient, I found the os pointing directly towards the introitus, and the fundus towards the pubes, the uterus being doubled up, both body and cervix being flexed forward, so that the two parts together make pressure upon the bladder, which is in all probability the expla-

nation of her desire to urinate constantly; she informs me that she has to get out of bed several times during the night to urinate. The mechanical pressure in this case is disturbing the functions of the organ.

In this case, if we remove the cause we will in all probability remove the cystic irritation, and possibly correct the menstrual derangement. Sufficient to say just now that we will employ the usual treatment for anteflexion of the uterus, and, if we can overcome that, all the symptoms will subside.

Case IV.—This patient, a married lady, menstruated regularly until four years ago. She comes to us to-day complaining of some disturbance of the bladder. I think I shall be able to illustrate to you a prolapsus of the bladder, which gives rises to much annoyance in this case. Now, here, as you observe, we have both walls of the vagina coming down; here, also, we find from one-half to three-quarters of an inch of laceration of the perineum. The posterior vaginal wall, as you will observe, is not prolapsed as much as the anterior wall and the bladder.

Now, as I introduce the sound into the urethra, it should, of course, pass in an upward direction, but, as you can see by the arc the handle of the instrument describes, it passes backward, giving us the diagnostic sign of prolapsus of the bladder and upper portion of the urethra. These parts have been torn away from their original support and carried downward; the bladder and the urethra have parted company with the structures of the pelvis which support them; this, therefore, would result in partial incontinence of urine, owing to the undue pressure brought to bear upon the sphincter of the bladder.

Incontinence, however, is most marked when the prolapsus of the bladder is in the first degree; in complete prolapsus incontinence disappears, and gives place to difficulty in urinating. I have seen some cases where the bladder had to be restored to its position before it could be emptied; in such cases I have instructed the patient to urinate while lying down upon the face. I remember being called in a case of this kind, in which the uterus was atrophied and the bladder rested upon the floor of the pelvis. She was unable to empty the bladder while in the erect position, but the moment the patient turned upon her face in the reclining position she could urinate with great comfort, and for the rest of her life I believe this patient will have to urinate in the knee-chest position. It is well to bear this point in mind.

In the case before us we must endeavor to do something to relieve her, as during the ensuing warm weather this prolapsus and partial incontinence of urine will be a source of great irritation and annoyance. I would, therefore, advise that she have perfect rest upon the vagina until this organ regains some tonicity, restore the perineum as I have, or introduce an anteversion pessary. Sometimes the restoration of the perineum as I have will suffice, but in other cases I do not consider [illegible] which we have named, because the perineum does not come down far enough to keep the bladder in place. There is, however, a little instrument recently invented by Dr. Malcolm MacLane, of Harlem, which answers when the anteversion pessary fails. This consists of a little grooved instrument, which is passed under the arch of the pubes lying up against it, which is secured by a cord attached to it and passed around the abdomen, the only difficulty being that the two bars running up on each side of the meatus cause some irritation, but it really answers the best purpose in these cases when rest, restoration of the perineum, and all other pessaries fail.

A question here arises, viz.: If you support the bladder and urethra, and retain them in position, will the attachments ever become restored? To this I must answer that I do not know. I have seen a large number of these cases, and watched them with great interest, but I have not yet seen any case in which such an event took place. My experience would lead me to say that they are never entirely cured, although made quite comfortable by proper treatment.

Case V.—This patient now before you is fifty-three years of age, has been married twenty-six years, and has three children. She is now suffering from prolapsus uteri, and also prolapsus of the bladder, as you all observe. This tumor projecting from the vulva is the uterus, bladder and vaginal walls. When I pass a sound up to the fundus, I find that the uterus is four and a quarter inches in length, showing it to be very much larger than it ought to be in a patient of this age. This which I now hold between my thumb and finger is a portion of the bladder. I need hardly add that we have here a well-defined prolapsus uteri in the third degree. We are sometimes in doubt as to the degree of prolapsus in some cases, but here we are fortunate enough in having it so clearly defined as to be unmistakable. Now, to prove to you that this is the bladder which I hold in my hand, I pass the sound into it, and in place of the instrument taking an upward direction it curves downwards, and those who are near by can see that I can put my finger upon the point of the sound within this sac in my hand, you can see it move my fingers. We have then complete prolapsus of the bladder as well as of the uterus. I will now carry the uterus up to its place in the pelvis, and in doing so you see that I press the cervix backward. If I did not do that, I should transform the prolapsus into a retroversion of the third degree. On making pressure I am very careful to carry the fundus upward. Sometimes it is impossible, as the uterus will double upon itself, the fundus falling backward; we then transform it into a retroflexion. In such cases it is then necessary to pass the sound into the uterus and guide it into position by this means.

In this case we have also an anatomical lesion of the perineum, and in addition to this we have also a functional lesion, a relaxation of the muscles.

When I make pressure backwards there is not much muscular resistance.

Now the point which I wish you to carry in your mind is the changes which occur in the other organs of the pelvis, owing to this uterine displacement. In addition to the uterus becoming displaced, the bladder also comes down with the uterus; and in all these cases of displacement, if they have existed for any length of time, the vaginal walls become relaxed, which leads to or follows the abnormal position of the uterus.

Sometimes we have only one vaginal wall prolapsed; usually, however, both. In this case both of these are entirely out of the pelvis, as you see, but the posterior vaginal wall does not come down so far as the anterior. In managing a case of this kind, just do as you see me now, push the uterus up in position, keep the patient in the recumbent position, and use the vaginal tampon to retain it there. I have just such a case at the present time in my private practice. Before the uterus was restored to place, she spent most of her time in urinating. Now I have her lying in bed under the treatment I have just described, and she can retain her urine as long as anyone. When the relaxation has been overcome to some extent, and the parts have regained their tonicity, we will restore the perineum in this case so as to get as much normal support as possible making a restoration of which at first appears to be more than is necessary to compensate for the tendency to prolapsus.

So we bring the vivifying process a little higher up into the vagina and bring together as much tissue as possible, making the perineal body run up into the vagina, so as to make a support for the bladder. But even then, in some cases, you will find that in time the bladder will gradually slip down, so that, perhaps, this lady will come back at the end of a year and say that our operation did not do her any good. We will have, however, gained much, having secured a good perineum upon which to rest a globe pessary. We will follow out precisely this treatment here, keeping the parts in position for a time, then by and by restore the perineum, and afterwards introduce the globe pessary, if need be.

Case VI.—Our next case is also one of incontinence of urine; the cause, however, of this condition in this patient is entirely different from that of the preceding ones, and therefore must not be arranged under the same head. The patient, however, comes to us suffering from this incontinence, and I now present her to you as illustrating another cause of this difficulty. This little girl is twelve years of age. When she was three years old she had an attack of scarlet fever, and has never been well since; she has not accomplished much in the way of growth or development; she looks somewhat anæmic. During the night she has to get up six or seven times to pass her water; and, unless exceedingly tired, the desire always awakens her. During the day the passing of water is equally, or more, frequent; for the reason she has been unable to attend school. This is very interesting, as it illustrates a class of cases which you will meet quite frequently. When urinating there is always pain, and she informs me that, if she attempts to restrain herself, it increases the pain; but immediately upon evacuating the bladder there is complete relief for a time. For the last nine years this has been going on. It is, however, a rare thing as a rule in this difficulty for the patient to awaken at night, the urine being generally passed in bed. This is a most miserable condition for a child to be in, being obliged to get up to urinate many times every night, or else to sleep in a bed saturated with urine.

Acute cystitis often follows the eruptive fevers, and sometimes in these cases it becomes chronic, as in this case, so that we should always be on our guard in the eruptive fevers and see to it if there is any cystitis following, otherwise the result will be the same as in this case. Now, whether the child has general cystitis or an inflammation of the neck of the bladder with urethritis remains to be seen. The way to make the diagnosis is repeatedly to examine the urine, selecting the last drachm or two which is passed, and if it contains pus and epithelium we may be tolerably sure that there is general cystitis. The order of the development of the pathological conditions in this case is as follows: first, scarlet fever, which gave rise to acute cystitis, or urethritis, which, in place of ending in recovery, ran into the chronic or continuing variety.—*Philadelphia Medical News.*

GOITRE.

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Treatment is both constitutional and local. Recent cases only, and those of a comparatively moderate bulk, offer a fair prospect of success to purely medicinal treatment. Simple hyperplasia, especially when recent, often subsides spontaneously without special therapeutic intervention. This may be followed by renewed hyperplasia, again amenable to spontaneous subsidence. Repeated recurrence, however, will culminate in permanent hypertrophy. The largest goitres are not amenable to any treatment, surgical or medicinal. Between these extremes the therapeutic indications vary greatly with the nature of the tumor and the individuality of the case. Goitre apparently due to causes associated with locality of residence, is best treated by change of residence. Co-existent catarrhal inflammations of the larynx and trachea usually require appropriate treatment, prior to the institution of any measures specifically addressed to the hypertrophied gland itself, inasmuch as the frequent succession of the tumor during paroxysms of cough is unfavorable to retrogression of the hyperplasia. The internal remedies employed in goitre are chiefly those classed as

alterants. Of these, chloride of ammonium and iodide of potassium are the most reliable. Hydrofluoric acid has recently been strongly urged. I have not used it. Chloride of ammonium is especially indicated, both for its favorable influence upon the inflamed air-passages, and for its value in promoting the absorption of hypertrophied tissue. The liberal administration of iodide of potassium is often effective in uncomplicated hypertrophic goitres of soft consistence, even when of considerable bulk. Temporary suspension of the remedy may become necessary during the treatment, should the general health suffer impairment. Constitutional disturbance, often wholly attributed to the remedy, is, in reality, due in great measure to the rapid absorption of the constituents of the diminishing tumor, and may be largely controlled by the institution of measures promotive of the emunctorial functions. Iodide of ammonium, alone or in combination with the chloride of ammonium, may sometimes be equally efficacious with the potassium salt, and less depressing. Iodine and iodoform are successfully employed, as well as the salts of iodine. In addition to the internal administration of the drug, iodine in tincture or compound tincture of officinal strength or diluted with ether, collodion, glycerine or alcohol, may be painted over the tumor once or twice a day, with advantageous results. Iodoform dissolved in ether, chloroform or collodion, is sometimes more efficacious. Collodion is often the preferable menstruum, by reason of the salutary compression which it exerts upon the mass. Inunctions with ointments of iodine, iodide of potassium, or iodide of mercury, variously diluted, are sometimes preferable to the application of paints or solutions. The biniodide of mercury, rubbed in under exposure to direct sunlight, is strongly urged by the British physicians in India. Any other method of securing the necessary heat should be equally efficacious. Vascular goitre is sometimes peculiarly susceptible to the favorable influence of the iodides. Excessive vascularity, however, is a great obstacle to the success of that influence. These methods are often efficient in diminishing the deformity to a great extent, sometimes rendering it imperceptible to casual inspection; but it is very rarely that entire absorption is secured.

Medicinal treatment failing to reduce a goitre, electric and electrolytic procedures may be instituted with some expectation of success. Percutaneous applications, both of the current from the battery and the current of induction, have been followed by absorption of the contents of the goitre; but the battery current is preferred, on theoretical grounds. Percutaneous applications being inefficient, electrolysis may be attempted by the insertion of needle-electrodes into the mass, and the passage of the battery current for a few (5-10) minutes, the process being repeated once or twice weekly. Both poles may be inserted into the tumor, or one only. In the latter instance, the needle is connected with the negative conductor, and the circuit is completed by placing a moistened sponge-electrode on the exterior. Some operators prefer to attach several needles to the conducting wire, for the purpose of establishing multiple centres of decomposition; but the quantity of electricity which can be utilized being limited it seems more logical to concentrate the action by the employment of a single needle. Extrication of hydrogen at the negative pole will cause the tissues around the needle to become swollen or puffed out. They will be first red, and later, black and blue, from effusion. A small eschar of cauterization will form at the point of puncture.

In cystic tumors, the choice of the pole for insertion into the mass will depend upon the intention of the operator to bring about disintegration of the contents of the cyst, on the one hand, or to promote coagulation on the other. In the latter case the positive is chosen. In goitres containing cysts and permeated by large veins, electrolysis for closure of the veins has been practiced simultaneously with evacuation of the contents of the cysts; the capillary trocar for the latter purpose being employed as the electrolytic needle (Henrot).

The following procedures, all of which are often successful, may be cited for reference :—

First as to simple hypertrophic goitre. Blisters over the goitre and inoculations with irritant substances, to excite cutaneous inflammation, and thus imitate nature in some of her demonstrations of spontaneous cure. Leeches externally, to reduce vascular congestion and promote circulation. Hypodermatic injections of ergotin over the goitre, for constitutional as well as for local effect. Interstitial injections of arsenic, ergotin, carbolic acid, tincture of iodine, tincture of the chloride of iron to provoke suppurative inflammation and the production of abscess. These injections are by no means innocuous, and are occasionally the direct cause of death. In favorable cases, however, local reaction is rarely severe, and, if so, may be moderated by the application of cold. The introduction of a seton is sometimes employed to excite suppuration. It may be passed either directly through tumor and skin, or through tumor only, after its exposure by cutaneous incision. When thrust through the skin, it is best to pass a silken thread, by means of a large needle, and to introduce additional threads as the cure progresses. The thrust of a seton lancet may cause hemorrhage The seton is best introduced quite far back, if readily practicable. The irritation produced by this treatment excites decomposition of the hypertrophied gland, with subsequent suppuration. Discharge usually takes place by the side of the seton. Should the size of the clumps of detritus impede discharge in this way, incision should be made at the chief opening, and the broken-down contents be withdrawn by grooved-director, spoon or finger. Their retention may provoke septicæmia, or even pyæmia,

The free movement of a trocar in the mass, to excite suppuration and convert the firm tumor into a cyst with fluid contents, for subsequent treatment, has been practiced (Billroth).

This procedure is attended with risk of wounding vessels and exciting serious hemorrhage, which, if profuse, may threaten suffocation by pressure, and thus demand prompt incision of the mass under very unfavorable conditions.

Whenever the attempt is made to transform an hypertrophic goitre into a suppurative cyst, the accomplishment of the purpose is announced by pyrexia. As soon as decided fluctuation becomes evident, it is necessary to make a long incision, to evacuate the pus and detritus. A counter-opening should then be made at a suitable point, and a seton or a drainage tube inserted: or the gum-elastic drainage threads of Prof. Levis may be employed. Disinfectant solutions are injected twice daily, or oftener, to keep the cavity free from pus and other products.

In *Cystic Goitre*, mere puncture with the trocar, for palliative purposes, is generally useless as a therapeutic measure, for the cyst rapidly refills. Its liability to be followed by hemorrhage within the cyst, from puncture of a vein, may involve a risk of compression of the air-passage, or of infiltration into the cervical connective tissue. Evacuation by trocar, followed by injection of alcohol, carbolic acid, compound solution of iodine, tincture of iodine, tincture of chloride of iron, or other irritants, to provoke obliterative inflammation is sometimes practiced, the solution being retained for minutes or hours, by plugging the canula. Evacuation by slow drainage is also practiced. These procedures have occasionally been fatal, by pyæmia. If the operation is successful, the cyst usually refills gradually, and the new products undergo gradual absorption in from three to six weeks, or longer.

Fibrous Goitres are sometimes treated by interstitial injections of arsenic, ergot, carbolic acid, tincture of iron and tincture of iodine. Fatal results have sometimes followed these measures, especially the injection of iron, so closely as to have been the direct consequence of the procedure. Usually from fifteen minims to a drachm of the solution is employed, and the injection is repeated at intervals of a week or two. Successive injections with impunity do not always guarantee survivals after subsequent ones. Injection into veins is usually the immediate cause of death. As urged by Lücke, iodine is the preferable substance for injections into goitres, on account of its decided absorbent influence on glandular tissue, a valuable addition to the condensatory, cicatricial process set up by the wound of the instrument, the repetition of which is thought to have, likewise, some favorable effect. The syringe being loaded, and the air expelled from its well-sharpened nozzle, the tumor is grasped in the left hand, in such a manner as to bring it firmly beneath the skin, at the point selected for puncture. This point should be at some distance from any cutaneous vein. The needle is then thrust sharply into the tumor, and the piston driven down until the desired quantity of fluid has been discharged. The syringe should be held by its barrel, during both insertion and withdrawal, so as to avoid escape of the solution into any vein which may have been pierced. As the needle leaves the skin the orifice should be covered by the finger, until protected by adhesive plaster, to prevent oozing, whether of blood or of solution. Hemorrhage from the vessels which course along the capsule of the gland is rarely serious, and usually controllable by digital compression. Pains in the jaws sometimes occur a few minutes or a few hours after the injection. To inject a *retrosternal goitre* the tumor must be held up during its ascent in respiration. Should it slip back before being penetrated, the needle can be left in the skin until a favorable moment affords the opportunity to complete the puncture.

Radical surgical operations for goitre are adapted rather to cystic than to other forms, and are to be instituted for relief from dangerous symptoms, and not for relief from deformity merely. The best prospects of success, however, occur in cases in which there is no immediate danger to life. Hence the majority of surgeons prefer to decline the performance of the radical operations, or at least to defer them to the latest moment. All extensive operations upon goitres are liable, first, to nerve-shock, from irritation of the deep-seated nerve trunks, and this, as I have seen, may terminate fatally. Secondly, in common with all serious operations about the neck, they are liable to be followed by pneumonia. Thirdly, they are liable to be followed by septic inflammation of the cervical connective tissue. All of these accidents are grave, sometimes inevitable, often fatal.

Ligation of the thyroid arteries, which sometimes acquire a bulk equal to that of the carotids, has been practiced, to deprive the gland of excessive nutriment, and thus induce absorption. Though occasionally successful, establishment of the collateral circulation occurs so promptly as a rule, as to thwart the object. The anatomical relations of these arteries to the recurrent laryngeal nerve are sometimes such that injury to the nerve cannot be avoided in their ligation; and thus aphonia may result as the only outcome of the procedure.

Ligation of the base of the gland is sometimes performed; usually after due exposure of the tumor by integumentary incision and careful dissection. Occasionally it is practiced subcutaneously. The ligature is tightened from day to day, until there is evidence of the death of the tumor; and the mass is then cut through by further tightening, or removed by the knife carried in front of the ligature. I have never seen this procedure.

Incision, quite a frequent operation, and particularly suited for multilocular and thick-walled unilocular cysts, is practiced by incising two or more inches of the skin at the most accessible point,

anteriorly or laterally, as may be. Careful dissection being made down to the cyst, and vessels secured as required, a puncture is made into the cyst and its contents are slowly drained off. Egress of thickened contents is to be facilitated by using probe, grooved director or small spoon. Should palpitation by probe or finger reveal multilocular cysts, the dividing walls are to be broken down with the finger. The cyst being drained, the orifice is to be enlarged to the extent of an inch or more and its edges separated by oiled lint or similar dressing. Should the walls of the cyst fail to collapse, it is good practice to maintain forced distention for some hours by pledgets of lint impregnated with some antiseptic (carbolic acid solution 1:20, bichloride of mercury 1 : 6000). Suppuration occurs as a result of the inflammation excited, and its products escape readily by the external opening, which is kept patent by drainage tubes, if need be,

Excision comprises the operation of incision as described, immediately followed by excision of the edges of the cyst. It is more serious than simple incision, being much more provocative of hemorrhage and serious sequelæ.

Extirpation of the entire gland is becoming practiced much more than formerly. Successful operations by the two Warrens, of Boston, and Greene of Portland, in this country; by Billroth, Kocher and others, in Germany, Switzerland and elsewhere, have imbued an element of confidence in the procedure, which had long been lacking. Of late, antiseptic dressings have been instrumental in lessening the mortality after operation. Nevertheless, the operation is too serious, if not too hazardous, to be undertaken for the mere relief from deformity.

Other things being equal, the larger the tumor the greater will be the difficulty attending its removal. These difficulties depend upon depth of situation, richness in blood vessels, and extensive attachments in dangerous localities. Attachment to the jugular vein is not uncommon. In some instances, indeed, the attachments are so profuse as to preclude the practicability of completing the operation. Cystic tumors have much more meagre attachments than are usual with solid tumors, and, in so far, are much the more suitable for the operation. Cystic and fibrocystic tumors are much more easily removed than solid goitre, some of them being susceptible of actual enucleation in bulk. Large, movable and pedunculated tumors are selected for extirpation, even when fibrous or calcified. Carcinomatous and carcinomatous goitres rarely ever invite encouragement for the operation.

The technical procedures in any extirpation will depend very much upon the individuality of the case. In all instances it is recommended to make as much use of the fingers and knife-handle as possible, and to postpone division of any important structure until it has been armed by double ligature. The blood vessels whose division might threaten serious hemorrhage, having been duly secured, detachment of the tumor, or enucleation in its capsule, if practicable, after thorough exposure, is usually performed from behind forward. It is considered inadvisable to alter the position of the patient after he has been placed under anæsthesia, lest sudden flexion of the trachea should threaten suffocation. In such an event immediate tracheotomy is demanded. Preliminary tracheotomy at the most practicable point is considered essential in some instances. When the capsule of the gland is too firmly adherent to the surrounding structures to admit of its detachment, it is split, and an effort made to turn the tumor out of it. Antiseptic precautions are taken to prevent unpleasant sequelæ. Death from the operation may ensue from shock, or from ingress of air into a vein. Among the sequelæ which may prove fatal after this operation, we may cite collapse, pneumonia, and extensive suppuration, even to hemorrhage by erosion of the carotid artery.

Excision of the isthmus of the gland has been proposed in substitution for extirpation of the lobes, in expectation of consequent atrophy of the gland tissue. Cures have been reported (Sydney Jones).

Should this anticipation be realized in the case of goitres of moderate size, the procedure should be instituted whenever gentler measures failed to control increase in the tumor. Subcutaneous bilateral division, by means of the elastic ligature, might prove a simpler means of attaining the same object. Serious hemorrhage has been reported from the latter procedure, and must, therefore, be watched for.

When direct treatment of the goitre is ineffectual or imprudent, reliance is placed upon palliative treatment of the distressing symptoms. Every possible means is employed to maintain the general health of the patient at the best standard. Every sort of exertion is to be avoided, which, by favoring circulation in the part, would tend to augment the volume of the tumor; and every precaution must be taken to avoid compression of the cervical blood vessels.

A number of minor surgical procedures become requisite, in many instances, according to the progress of the case. Thus in post-sternal goitre pressing upon the windpipe, it is recommended that efforts be made to elevate the tumor, and attach it to the overlying integument. To do this, the tumor is pierced with a strong ligature, by means of which it is kept directly beneath the skin at the upper portion of the neck. Adhesive inflammation between skin and tumor is then excited at this point by the use of the Vienna paste, or some other caustic. If preferred, the tumor may be transfixed with a strong needle or safety-pin, to keep it in contact with the skin (Bounet).

Dyspnœa, usually worse at night, is often relieved by incision into the gland. When urgent, tracheotomy may afford relief, provided the compression exist at the upper portion of the trachea, a

point which can sometimes be determined by laryngoscopic inspection, as well as by palpation externally. The tracheotomy would be performed below the growth, when practicable; in some cases, above it; and directly through the mass, in desperate cases, without choice of locality. In some instances it is necessary to approach the trachea from the side. In most of these instances a long tube is required to reach beyond the point of obstruction. If not at hand, a catheter or a section of rubber tubing can be employed as a substitute. In dyspnœa due to pressure upon the nerve trunk, and not to actual compression of the air passage, tracheotomy would be useless.

In the treatment of exophthalmic goitre, the neurotic condition is sought to be controlled by belladonna, atropine, duboisine, hyoscyamine, digitalis, veratrum viride, arsenic, the cold douche, or the wet pack, singly or in various combinations. Ergot* (Clark) and iodoform †(Carpenter) have been especially extolled as efficient remedies. Local applications of iodic preparations are used, as in simple hypertrophic goitre. Applications of the ascending electric current from the battery (20-40 elements), along the region of the cervical portion of the sympathetic nerve (von Dusch), are often useful, not only in diminishing the size of the goitre, but in ameliorating the cardiac disturbance, even when they fail to diminish the bulk of the tumor. In making these applications, the positive pole may be applied, by sponge-electrode, to the side of the seventh cervical vertebra, and the negative high up in front of the sterno-cleido-mastoid muscle. Or the anode (positive pole) may be applied at the fifth dorsal vertebra, and the cathode (negative pole) high up in the cervical region. Some electricians pass the current from side to side, high up in the cervical region, or even across the occiput, one pole over each mastoid region, or even through the two temporal regions.

Fortunately, in these instances, the electricity travels chiefly along the skin, without penetrating the cranium. On theoretical grounds, it has always been my own practice to avoid crossing the brain unnecessarily with an electric current. I have known serious accidents to follow neglect of this precaution. The current may be allowed to run from one to three, four or five minutes, with momentary reverses of its direction at intervals of from thirty seconds to one minute. Momentary reversal of a current often increases the efficacy of the prolonged application immediately succeeding. These applications can be made alternately on each side of the body, and be repeated at intervals of two or three days.

Months, however, often elapse before anything like satisfactory involution of the tumor has resulted.

In the [illegible] to the treatment [illegible] operations [illegible] often [illegible] control the [illegible] another indication of mania. As already mentioned, cures of this variety are rare. A case under my own observation, mentioned in the first edition (1872) of my treatise on Diseases of the Throat (p. 517), as having recovered under the use of cold applications externally, conjoined with the administration of strong nervines and ferruginous tonics, has remained permanently well—as I have learned from my friend Dr. James Collins, during the preparation of this article.

* Twenty minims of the fluid extract, or its equivalent, three times a day, gradually increased.

† Three grains three times a day, in pill, in combination with one gram of iron by hydrogen, rubbed up with glucose.

ON THE VALUE OF CERTAIN SINGLE SYMPTOMS IN THE DIAGNOSIS OF DISEASES OF CHILDREN.

The *London Medical Record*, May 15, 1884, says: In this paper Emeritus Professor Pollitzer contributes (*Jahrbuch für Kinderheilkunde*, Band xxi, Heft 1) from his ripe experience some very valuable hints for the guidance of the less initiated.

The "single symptoms" which he enumerates are in some cases pathognomonic, and in others are of great importance for differential diagnosis. The first symptom is a *strongly marked nasal or palatal cry*. This is present in, amongst other complaints, syphilitic ozæna, hypertrophied tonsils, and paralysis of the soft palate; but where these can be excluded it affords very strong presumption of retropharyngeal abscess. Dr. Pollitzer relates that on one occasion he was examining a child when the nurse passed through the room, bearing another, four months old, in her arms. On hearing it give this nasal cry he stopped the nurse, but the mother affirmed that the baby was quite well. However, Pollitzer introduced his fingers and felt the expected swelling. This was incised, and a large quantity of pus evacuated.

The second symptom is *an excessively prolonged, loud-toned expiration, with normal inspiration and without dyspnœa*. This is an early symptom of chorea major, and may precede all other manifestations of the complaint. In illustration of this, the author mentions that he was once called to see a case of supposed croup; but, on observing this peculiar breathing, he felt no hesitation in diagnosing chorea. The mother had observed this symptom about two hours, and stated that it appeared suddenly, when the child was apparently quite well and asleep. The next day he was informed that this breathing continued for another hour, and then gave place to a singing semi-delirium. Later, the ordinary symptoms of chorea developed themselves.

The third single symptom is that of a *high thoracic continued sighing inspiration*. The author regards this as almost pathognomonic of weak heart, and of certain cases of acute fatty heart. The breathing differs from that of croup and other stenoses, in that, while the diaphragm is almost passive, the accessory muscles of inspiration are in vigorous action.

The symptom is of especial value, because it is early, and furnishes an indication for treatment long before the other signs—such as cyanosis or pallor of the face, thready pulse, cold extremities etc.—show themselves.

Another "single symptom" of importance is *the presence of a pause at the end of expiration.* This serves to distinguish between laryngeal catarrh and croup, and, when well marked, absolutely excludes the latter. In examining for it, however, the room should be perfectly still, and the ear should be placed close to the patient's mouth. The author relates how he succeeded in diagnosing laryngeal catarrh from the mere presence of these pauses, in a child who had been ill three days with stenotic breathing, hoarseness, and great somnolence. The laryngoscopist who was called in, confidently expected to find well-marked false membranes; but no such were visible, and the child was well in a few days. Another symptom of which it is important to understand the significance is the so-called *respiratio stridula.* It consists of slightly noisy, but otherwise normal inspiration, and a loud bleating, interrupted (staccato) expiration; it continues day and night, sleeping and waking, with very rare free intervals of ten minutes or a quarter of an hour. It begins soon after birth, and lasts for from eight to twelve months. To the physician unfamiliar with the condition it appears to be a serious affair, and to demand active measures; but, as a matter of fact, it involves no dyspnœa, and does not affect the nutrition or development of the child; moreover, it is very obstinate to treatment, and ultimately ceases of its own accord. The author regards it, therefore, as being within physiological limits, and recommends no treatment.

The next series of symptoms relates to the brain and the first is *a remarkable drowsiness which makes its appearance without fever or other disturbance and persists for some time.* Pyrexia, from any cause, is enough to produce drowsiness in a child; but when the latter coincides with a normal temperature, and continues so for twenty-four to thirty-six hours, it becomes a most valuable symptom of commencing brain disease; and the same holds good when the drowsiness sets in upon convalescence from fevers when pyrexial stages are passed. The only other conditions that can produce this apyrexial drowsiness are narcotic poisons and uræmia, but these are easy to differentiate. Another single symptom of great value in the early diagnosis of brain-disease is *a very elevated incompressible anterior fontanelle.* This indicates not only increase of the contents of the skull, but also that that increase is due to something more dangerous than simple hyperæmia. It is all the more valuable when the child is wasted from any cause. When the swelling is so great as to resemble a wedge, and no trace of pulsation is present, the disease is probably either intermeningeal hæmorrhage or prurulent meningitis of the convexity.

The next series of single symptoms relates to the *character of the child's cry.* 1. A violent shrill cry, lasting two or three minutes, marked by anxious expression, and occurring about an hour after the child has fallen asleep, and repeated night after night, is probably due to the action of dreams on an irritable nervous system. It can be cured by the administration of a full dose of quinine an hour before bedtime. 2. A cry, lasting frequently five to ten minutes, and recurring periodically several times in the twenty-four hours, indicates, more especially if dysuria have been observed, spasm of the bladder, and can be cured with a dose of belladonna at bedtime. 3. The cry accompanying defæcation indicates, as is well known, fissure of the anus. The author says nothing of operation for this, and recommends aperients and an ointment of zinc and belladonna. 4. "A violent, almost continual cry, the hands grasping the head, which is rolled round and round, and buried in the pillow," in the little children, indicates otalgia. 5. A cry, lasting days or weeks, increased on movement, and associated with profuse sweating and fever, is rare, but may indicate acute general rickets. 6. The cry associated with chronic sleeplessness is difficult to relieve, though it frequently appears to have no ill-effect upon the child's nutrition. In some cases it appears to have been inherited, as one of the parents has occasionally been observed to be the subject of insomnia or hemicrania.

The next series of single symptoms have no particular interdependence. Amongst these are the following: 1. A striking collapse and immobility of the nostrils almost always indicates hypertrophied tonsils. 2. A weakness and immobility following a short illness, and out of all proportion to such a slight cause, is very frequently the first symptom of infantile paralysis. 3. A single symptom of importance, in a condition which is sometimes void of symptoms (congenital idiocy), is the habit the infant has of perpetually and automatically placing the hands in front of the face. 4. A stiffness of posture and gait, with a pained expression on changing position, is an early symptom of spondylitis. 5. Obstinate vomiting after every kind of food, and lasting for weeks, indicates, in a child whose fontanelles are closed, and whose cranial circumference is large, the supervention of acute upon chronic hydrocephalus. The author, in conclusion, is careful to give the oft-repeated warning against diagnosing a disease from a single symptom—a real pathognomonic symptom being rare. He claims for his observations, where these are original, the merit of facilitating diagnosis at a stage when treatment is likly to be followed by rapid benefit.

The painful burns produced by nitric acid may, according to a writer in the *Chemical News*, be successfully treated by a dilute solution of sulphurous acid applied instantaneously.

EPILEPSY.

By William Pepper, M.D., LL.D., Professor of Principles and Practice of Medicine, University of Pennsylvania.

Abstract of Paper, read before the Section on Practice of Medicine at American Med. Association.

In a purely clinical discussion of epilepsy our conception of the disease must be a broad one. Strictly, cases of organic disease should be excluded. This is, however, sometimes difficult. There is no trouble in those instances in which the common symptoms of brain tumor are present, but in those cases in which epilepsy follows sunstroke, the distinction is not so clear.

Hysteria should also be excluded. While typical epilepsy and typical hysteria are readily distinguished, yet there are many facts showing their analogy. A case was then quoted of hysteria associated with neurasthenia, apparently dependent upon membranous enteritis, with great prominence of the vaso-motor symptoms, and the appearance of crops of stigmata before the attack.

Both epilepsy and hysteria represent conditions of malnutrition with morbid sensibility and irritability of nerve tissue brought about in the most varied manner. In hysteria it would seem that the ganglionic nervous tissue is especially vulnerable, and the gray matter within the encephalon less so, though instability of this may co-exist. An attack may be induced through violent disturbance of ganglia controlling intra-cranial circulation and consequent discharge from unstable gray centre in cortex or elsewhere. Epilepsy would seem to depend upon a supremely unstable condition of one or more areas of gray matter within the encephalon, rendering it liable to sudden and violent discharges. This instability may be brought about in very varied manner. The most prominent influences are heredity, nervous exhaustion, as from over-growth, over-strain or exhausting illnesses, shock or sudden powerful impressions, as from physical injury, with or without distinct lesion of cranial bones, sunstroke, purely psychical shocks, as from fright, instability of circulation, with disturbed nutrition of the brain as in heart disease; and in connection with heart disease there is a possibility of minute embolisms interfering with the nutrition of small areas, prolonged peripheral irritation, especial reference being made to chronic catarrhal irritation of the gastro-intestinal tract. A consideration of these points teaches that those cases grouped under the name of epilepsy are not afflicted with a single definite disease, but they exhibit in common merely a state of impaired nutrition and morbid instability of the gray matter, varying greatly in different cases. In some cases there are probably minute molecular changes in the nervous tissue. In a large number of cases, however, the recurring convulsions are connected, not with irregular advancing morbid tendency, or irregularly progressive anatomical change, but with occasional and irregular operation of those widely different causes, which are calculated to disturb the weak centre and induce explosive discharges.

The evil effects of habit are prominently exhibited in this disease, so that if the instability cannot be reduced, and the provoking causes removed, the attacks will be more and more readily induced, until they will at last be excited by almost imperceptible causes.

It is important to recognize the degree of instability in these cases. Every one is liable to convulsions; it is merely a question of the provoking cause required. Provoking causes cannot be found in all cases of epilepsy, but the more closely they are sought for, the more frequently will they be found. A careful study in this direction is of the greatest importance in every case.

Among the most frequent provoking causes may be mentioned indiscretions in diet or improper food. This may act in different ways, by exciting local irritation of the mucous membrane which will act in a reflex manner, or it may induce a condition of toxæmia from the admission to the blood of imperfectly elaborated elements, or from the failure of the emunctories to remove some product of mal-assimilation. In many of the cases seen by Dr. Pepper the attacks bore a close analogy to the spells of vertigo induced in lithæmic patients by indiscretions of diet. In this connection allusion may be made to the fact that the injection of the normal digestive ferments into the general circulation is capable of inducing serious nervous symptoms, even convulsions and death.

Scarlatina is frequently followed by epilepsy. In some cases this is explained by the tendency to wide-spread tissue change, so that impaired nutrition of the gray matter might be expected to occur at times. In other cases this disease may act by leaving such a degree of renal insufficiency as will, under comparatively slight causes, lead to toxæmia, from the retention of mal-assimilated materials. It does not seem necessary that such a condition should reveal itself by the presence of albumen in the urine, although Huppert states (*Archiv. fuer Psychiatrie*, 1877, p. 169) that immediately after an epileptic attack albumen is almost invariably present, and hyaline tube casts can frequently be found.

In those cases in which the morbid state of the nervous system has been brought about by sunstroke or exposure to excessive heat it will be often found that attacks will be induced by undue exposure to the rays of the sun, or even to intense light. When the nervous instability is associated with cardiac lesion, I have frequently noticed that muscular exertion or excitement of the circulation directly induced the attacks. In all cases mental excitement or too close application, or sexual excess, will favor the occurrence of the seizures. These causes are operative on account of the constitutional susceptibility.

It is often stated that epileptics are in full health. This certainly does not accord with my

experience. Careful study has usually shown some derangement o impairment of important functions.

The principles of rational treatment must follow from such considerations as the above. No one plan of treatment is applicable to all, or even to a large majority, but each case requires separate study and a special line of treatment.

The primary cause should be removed if it can be discovered, and the remedies to correct the provoking cause. The leading principles of treatment are to relieve anæmia, neurasthenia and morbid susceptibility by diet, change of occupation, change of residence and rest. Intestinal irritation should be removed, especial reference being made to an absolute milk diet long continued. Other special forms of diet are required in certain cases. Nitrate of silver is of a particular value in those cases where gastro-intestinal irritation is a prominent condition.

Over-exertion should be avoided in all cases, and especially in cardiac cases. Excitement and over exertion of mind should also be guarded against.

Counter-irritation should be employed, the best effect being obtained from the actual cautery, and this is of special value in those cases where definite intracranial irritation is suspected, as after insolation. The cautery occasionally exerts a good effect in organic cases.

Trephining is valuable in a considerable number of cases, when circumscribed lesion of the cranial bone is suspected.

The removal of genital irritation is important, the question of circumcision being the most important. Its value has, however, probably been over-estimated.

It is important to arrest the attacks, if possible, for their continuance strengthens the bad habit, and renders subsequent attacks more readily developed. The use of the ligature to arrest the aura, nitrite of amyl, and other expedients may be employed. Various drugs are to be recommended such as the bromides, belladonna and assafœtida, enemas of chloral, iron and other tonics. The great value of the bromides is recognized, but caution is to be given in regard to their frequent failure, their abuse and their dangers.

The danger of drifting into a routine treatment is greater, and its results more disastrous in this disease than in any other.

PILOCARPINE IN HICCOUGH.

Dr. W. C. Pipino thus writes in the *St. Louis Courier of Medicine* for April, 1884:

In the January number of the *Journal of Am. Med. Association* appears an article taken from the *Allgemeine Wiener Medizin. Zeitung*, by Dr. Ruhdorfer, on the use of pilocarpine in severe hiccough. The writer says that after trying all the remedies usually given in such cases, as quinine, belladonna, castoreum, valerian, aromatics, mustard poultices over stomach, dry cupping down the spine, chloroform, ether, emetics, purgatives, etc., he obtained no relief for his patient, a young lady, who dragged through a miserable existence for three months. Remembering a case in the *Revue Medico-Chirurgicale*, he injected a solution of pilocarpine hypodermically, when the hiccough was cured as if by magic, and never returned. I see reference is made to the same case in the *Weekly Medical Review*, February 2, 1884.

I had a case on hand at the time of an old Israelite gentleman, seventy three years of age, who, on the night of February 1st, received a severe fall in the dark from the platform in front of one of our hotels sustaining a severe injury of his right side. February 6th he was taken with hiccough, which manifested itself whenever he attempted to eat or drink anything; a mere thought of taking water would cause the hiccoughs to come on and last a considerable time. The age of the patient and his weakened condition necessitated prompt measures. I had failed to relieve him with all the remedies I used, viz: belladonna, morphia musk, chloroform, etc., when I happened to read the above article. I immediately prepared a solution of pilocarpine muriate, and injected hypodermically three centigrammes. In five minutes after giving the injection profuse perspiration and salivation took place; the perspiration was so profuse as to saturate his clothing. He hiccoughed twice afterwards on attempting to drink water to allay his thirst, caused by the excessive transpiration. Since then he has not had a return of the trouble, much to my own as well as the patient's relief. He is now able to take his nourishment without trouble, consequently is gaining in strength. While my case did not respond as readily as Dr. Ruhdorfer's, I am satisfied with the results.

TREATMENT OF COLD IN THE HEAD BY COLD ABLUTIONS OF THE FEET.

In the *Russkaia Meditz*, No. 10, 1884, p. 234, Dr. Prokop Popoff, of Minusinsk, Siberia, states that in more than 300 cases of acute and chronic rheumatic coryza he used with great success the following simple plan of treatment: Twice daily (in the morning on rising, and at night on going to bed) for two days the patients are ordered to wash their legs from the sole up to the knee with ice-cold water, and to subsequently rub the washed parts with a dry towel, or a piece of rough linen or cloth, until a vivid redness and feeling of warmth appears. The whole procedure takes not more than five minutes. No other measures or precautions are required. A striking improvement is usually so great that many patients content themsleves only with one day's treatment, regarding themselves as cured.—*London Medical Record.*

ANTISEPTIC DRESSINGS AS THEY ARE USED AT THE NEW YORK HOSPITAL.

Dr. Robert F. Weir of New York (*N. Y. Medical Journal*, Jan. 10 1884), contributes a paper with the above title. He says: "What we still aim at in the treatment of wounds is to place the divided or injured parts in such a condition as to permit of the best possible drainage, and to keep them at rest as long as may be without frequent renewals of the dressings; and for the accomplishment of the latter end we are forced to use such chemical substances as will prevent decomposition."

In the New York hospital corrosive sublimate is used almost exclusively as an antiseptic upon gauze or jute. The sublimated gauze is prepared by immersing the bleached material in a solution as follows: Corrosive sublimate, 20 parts; water, 4,480 parts; glycerine, 500 parts, for 12 hours, then wringing out, and allowing to dry, as far as the glycerine will permit. At the time of operation a sublimate solution, 1-000, is allowed to trickle slowly but nearly continuously over the incision; bleeding vessels are tied with sublimated catgut. The wounds are united with catgut or sublimated silk and the continuous suture is employed. Dark rubber drainage tubes or decalcified chicken bones are introduced in proper positions, and after carefully cleansing the wound by injecting the bichloride solutions through the tube, gauze handkerchiefs are placed over the centre of the incision and considerable pressure exercised. Over these handkerchiefs peat, jute or other absorbent material is used. No impervious protective is used over the dressings, as, by retaining the moisture of the dressings and the sweat, it is thought to act too much as a poultice.

If after a few days there is staining of the dressings, douche the parts anew with bichloride solution and apply an additional mass of sublimated cotton or gauze over the wound. "We do not change the dressing until we find some decided evidence that things are doing wrongly * * * I should consider an elevation of temperature persisting for twenty-four hours a sufficient reason for removing the dressing and searching for the cause."

Metallic instruments must be immersed in a 5 per cent. carbolic solution, as the bichloride will form an amalgam with them. In the New York Hospital not only is the part to be operated upon washed with soap and water, but also with turpentine and alcohol—two ounces to the pint. Great care is taken to carefully prepare and disinfect sponges, and if they have been used in vagina, rectum or other uncleanly localities they are destroyed after using, otherwise they are carefully cleansed and kept in an antiseptic solution.

Finally the principle of rest should be carried out thoroughly.

"In the north of Germany corrosive sublimate has come to displace iodoform and carbolic acid almost entirely; iodoform is used to some extent in southern Germany, particularly in Vienna; but the feeling of security I found was much greater formerly (as indeed it is in England) than having now the sublimate dressing. I have anywhere else [illegible] I have [illegible] I never [illegible] the [illegible] effect [illegible]

R. W.

A METHOD PROPOSED TO SECURE CHILDREN AGAINST ATTACKS OF DIPHTHERIA.

Dr. F. Peyre Porcher: Acting upon the theory that diphtheria (whether or not it may depend upon a specific germ) is at its inceptive stage local, and has its seat in the fauces, which, if impressed or modified by suitable agents, will not offer a midus for its reception, Professor Porcher proposes as a prophylactic the following: ℞.—Tinct. ferri chlorid., 2 to 3 drams; potassii chloratis, 2 to 3 drams; quiniæ sulph., 15 to 20 grains; sodii hyposulphitis, 1 to 2 drams; alcoholis, 1 ounce; aquæ, 6 ounces. M. Sig.—A teaspoonful to a dessertspoonful three times a day in water. To be used by those who are exposed to the disease.

The author has used this formula for a number of years as a prophylactic for diphtheria in many families whose members had been exposed to the disease, and states that he has never known a case of diphtheria to occur where it was so employed.

Evidence is not wanting from other sources of the value of the medicines above named, especially the muriated tincture of iron and potassium chlorate, both as a prophylactic and cure for diphtheria.

The same formula is said to be serviceable in scarlet fever. And with two or three drams of acid tartrate of potassium, in lieu of the hyposulphite of sodium, it has proved of great value in the treatment of erysipelas, ulcerative sore throat, cellulitis, and diseases of the lymphatic system.—*Louisville Med. News.*

A NEW TREATMENT FOR TAPE-WORM.

J. G. Brooks, M.D., of Paducah, Ky., in a communication to the *Medical and Surgical Reporter*, says as follows:

"I have had within the last three years several cases of tape worm to treat, and finding such strong objection to the large draught of medicines in ordinary use, I prescribed the following:

℞ Chloroform,
Ex. male fern, aa fl. ʒ j.
Emul ol. ricini (50 per cent.) ʒ iij. M.

Sig.—All to be taken at once after twenty-four hours' fast.

In every case the medicine was well borne, and the worm expelled entire. In two cases I omitted the male fern, and the result was the same as when the latter drug was in combination.

My object in reporting this treatment is to induce others of the profession to try the chloroform and report results.

I claim for this agent a specific and rational action as an adjuvant in the expulsion of the worm. It anæsthetizes or suspends vitality, and any active purge during anæsthesia of the tænia is all that is requisite to expel it.

I earnestly ask those who have cases to try the chloroform, or chloroform and male fern, as above prescribed and report results.

A NEW TREATMENT FOR NEURALGIA.

The latest agent introduced for the relief of neuralgia is a one-per-cent. solution of hyperosmic acid administered by subcutaneous injection. It has been employed in Billroth's clinic in a few cases. One of the patients had been a martyr to sciatica for years, and had tried innumerable remedies, including the application of electricity no fewer than two hundred times, while for a whole year he had adopted vegetarianism. Billroth injected the above remedy between the tuber ischii and trochanter, and within a day or two the pain was greatly relieved, and eventually it quite disappeared. It would be rash to conclude too much from these results, in the face of the intractibility of neuralgia to medication, but if it really prove to be as efficacious as considered, hyperosmic acid will be a therapeutic agent of no mean value.—*Medical Record.*

IRIDIN IN THE TREATMENT OF THE SICKNESS OF EARLY PREGNANCY.

Dr. Berry Hart recommends the use of two grains of iridin in the form of a pill to be taken at night, and to be followed in the morning by a draught of Friedrichshall water, a teaspoonful of Carlsbad salts, or a doubly strong Seidlitz powder. He states that out of nine cases where this treatment was tried, eight were cured. He was led to the use of this remedy by Dr. Matthews Duncan's allusion to the probable influence of the liver in causing the vomiting of pregnancy.—*Edinburgh Clinical and Pathological Journal.*

WATER FOR INFANTS.

With the exception of tuberculosis, no disease is so fatal in infancy as the intestinal catarrh of infancy, occurring especially during the hot summer months, and caused, in the great majority of cases, by improper diet. There are many upon whom the idea does not seem to have impressed itself that an infant can be thirsty without at the same time being hungry. When milk, the chief food of infants, is given in excess, acid fermentation results, causing vomiting, diarrhœa, with passage of green or greenish-yellow stools, elevated temperature, and the subsequent train of symptoms which are too familiar to need repetition. The same thing would occur in an adult if drenched with milk. The infant needs, not food but drink. The recommendations of some writers, that barley-water or gum-water should be given to the little patients in these cases, is sufficient explanation of their want of success in treating this affection. Pure water is perfectly innocuous to infants, and it is difficult to conceive how the seeming prejudice against it ever arose. Any one who has ever noticed the avidity with which a fretful sick infant drinks water, and marks the early abatement of febrile and other symptoms, will be convinced that water, as a beverage, a quencher of thirst, as a physiological necessity, in fact, should not be denied to the helpless members of society. We have often seen an infant which had been dosed *ad nauseam* for gastro-intestinal irritability assume, almost at once, a more cheerful appearance and rapidly grow better when treated to the much-needed draught of water. If any one prescription is valuable enough to be used as routine practice, it is "Give the babies water."—*Medical Record.*

A SPECIFIC FOR HICCOUGH.

Dr. Henry Tucker recommends, in the *Southern Medical Record*, the use of the following very simple remedy, in the treatment of hiccough, namely: Moisten granulated sugar with good vinegar. Of this give to an infant from a few grains to a teaspoonful. The effect, he says, is almost instantaneous, and the dose seldom needs to be repeated. He has used it for all ages—from infants of a few months old to those on the downhill side of life, and has never known it to fail. The remedy is certainly a very simple one, and although no theory is advanced to account for its wonderful action, it merits trial.

SANTONIN FOR GLEET.

The fact that many important discoveries are the direct result of accident, finds another illustration in the paragraph, now going the rounds of the press, and originally taken from the *Lancet*, containing a description of the effects of santonin on a case of gleet. The patient consulted Dr. William Anderson, on account of lumbrici, from which he was suffering. The doctor prescribed santonin for the parasites, and meeting the patient some time afterwards, was told by him that the medicine had not only killed the worms, but had dried up the gleet from which he had long been suffering, in spite of treatment with the usual remedies. The effects of santonin on the urine are, of course, familiar to all, and a trial of the remedy in obstinate cases of gleet will, doubtless, be given

it by those who may chance to read this note. Dr. Anderson recommends it to be given in a dose of five grains, rubbed up with equal quantity of sugar of milk, and taken twice a day, fasting, in milk.

ARSENIC IN GASTRIC ULCER.

Of course, we all know that regulation of the diet is of paramount importance in the treatment of gastric ulcer. But, making due allowance for the great improvement which always follows the regulation of the diet, Dr. John Strahan (*Brit. Med. Jour.*, June 21, 1884,) thinks the treatment by small doses of arsenic gives results to be obtained by no other mode of treatment. More than, at the outside, two drops should never be given, as the irritating action would then commence to the injury of the patient. By an action on the end organs of the gastric neves, small doses relieve the pain wonderfully, and improve the general tone of the gastric mucous membrane, curing the gastric catarrh which exists at least in the immediate neighborhood of the ulcer, and thus relieving the patient of the vomiting of mucus, which is sometimes an important feature of the case. We also know that a weak solution of arsenic will, out of the body, heal unhealthy ulceration, *e. g.*, cynchia, or even when given internally, so that it is not strange that it should act locally as a cicatrizing agent on a gastric ulcer. Nitrate of silver, the next best remedy, recommended by such men as H. C. Wood, Da Costa, and Wilson Fox, is not nearly so efficacious, either in relieving the pain or in promoting cicatrization.

SIMPLE INFLAMMATORY TONSILLITIS.

Dr. J. Solis-Cohen treats this affection by a modification of the *guaiac* treatment, which consists in the use, as a gargle, of a mixture known in the House Pharmacopœia of the *Philadelphia Polyclinic* as the Gargarysma Guaiaci Composita. Two fluid drams each of the ammoniated tincture of guaiac and the compound tincture of cinchona are mixed with six fluid drams of clarified honey, and shaken together until the sides of the containing vessel are well greased. A solution consisting of eighty grains of chlorate of potassium in sufficient water to make four fluid ounces is then gradually added, the shaking being continued. If this is carefully done *secundum artem*, a not unpleasant mixture will be produced. Without due care, however, the resin will be precipitated. The patient is directed to gargle with this mixture freely and frequently, at intervals of from one-half to three hours. In some cases a saline cathartic is first administered. Should any of the guaiac mixture be swallowed it is considered rather beneficial than otherwise, and in some cases it is advised to swallow some of it. Relief is usually experienced in a few hours.—*St. Louis Courier of Medicine.*

A NEW, SUCCESSFUL, AND PALATABLE MEDICINE FOR THE TREATMENT OF TAPE WORM.

Under the above title Dr. Howard Pinkney, writing from Sharon Springs, describes his experience with the oil of the pine needle, made from the *pinus pumilio*. A hall-boy of the hotel had suffered for five years from tape-worm. He had been treated for four years in New York, but never had succeeded in getting rid of over four feet of links at a time. Dr. Pinkney, not being able to get any male fern, pelletierine, or pumpkin seeds, therefore tried the following experiment: "The patient fasted from breakfast, and at 9 p.m. he was given one tea-spoonful of oil of the pine needle in half a glass of milk. The following morning, as there was no perceptible action of the medicine, the dose was doubled. This, the boy said, had a most agreeable taste. One hour later he took a dose of castor oil, and in the course of two hours after this he passed an entire tænia solium measuring 15 feet 6 inches in length and one-half inch at its broadest part, gradually tapering down to almost a thread. To be positive that none remained behind, he was given two tea-spoonfuls more, but no sign of any worm or part thereof passed. This oil," writes Dr. Pinkney, "contains no turpentine, is fragrant in its odor, and when mixed with milk is very agreeable to the taste. It produces no strangury, tenesmus, or other unpleasant or distressing symptoms. The patient can generally pursue his ordinary avocation." Our correspondent would be pleased to know if any of our readers have ever read or known of its use in similar cases.—*Medical Record.*

CANCEROUS UTERUS.

A new method of partial removal of the cancerous mass by the knife, followed by the local application of caustic, is described by *Dr. Van de Worker* in the January No. of the *American Journal of Obstetrics.*

The author amputates the neck even with the vaginal junction, then removes the remaining diseased tissue as far as the inner os. This may be done with the knife, scissors or curette—where the tissues are very friable the curette is sufficient for the purpose. Irregularities of the incised surfaces should be smoothed off with scissors. The cavity is then packed with iron cotton, made by absorbed cotton, dipped in a solution of *one* pint of sulphate solution to *three* of water. The cotton should be wrung nearly dry and the cavity filled with small masses about the size of a chestnut.

No force should be employed in filling the cavity, and none is required in removing the pieces, which can be taken away one by one. Care should be exercised not to allow any blood to be retained, and if we find there is any exudation among the packing, the latter should be removed, and all clots taken away before repacking.

This dressing should be removed the following day. The parts must be thoroughly cleaned and then apply the same caustics. These are made of two degrees of strength, 5 v to aq 3j, and equal parts by weight of zinc chloride and water. A pomade of twenty per cent of soda in vaseline, 1 to 3, and 1 to 20 per cent solution of the same salt in water is placed ready for use.

The cavity being ready for the caustic the vagina and labia are protected by the pomade. Great care is necessary to protect the meatus and adjacent tissues from the action of the caustic.

The strength of the caustic to be used is determined by the thickness of the tissues to be acted upon, less than 5 or 6 millimetres in thickness would not bear the use of stronger caustic. The weaker solution is also generally used upon the vagina. The caustic is applied on masses of cotton, which are packed into the cavity and the surface of the packing, and about 2½ centimetres of the upper part of the vagina is filled with absorbent cotton saturated with the bicarbonate of soda solution.

The pain following the operation if severe can be relieved by an hypodermic of morphine.

On the 2nd or 3rd day the cotton is removed from the vagina and also from the uterine cavity, if loose; if still adherent it is well to wait a day or two more. On examination, a firm, white, cement-like surface is seen. In from 5 to 10 days this slough will separate, and at no time should any force be used to effect its separation.

The exfoliation of the slough may be encouraged by very gentle douches of carbolic solution. —The tendency to bleeding during the stage of sloughing is much lessened by the use of opiates and keeping the patient perfectly quiet in bed. The bladder should be emptied by the catheter—Should the hemorrhage be severe, some form of astringent can be used. Cicatrization is complete in from two to four weeks, leaving a contracted, pale, soft, velvety membrane, free from any odor or discharge.

This plan of treating such cases of cancer of the uterus has much to commend itself to our favor and imitation, and the issue of several cases reported are most encouraging.

GREAT SURGICAL OPERATION.

The Dublin *Medical Press and Circular* of October 1, 1884, says:—

The current number of the *Independence Belge* mentions a great surgical operation which has just been performed in Brussels by Dr. Langenbusch, of Berlin, who must not, however, be confounded with his eminent fellow citizen Langenbeck. The subject of this daring and successful proceeding was M. Eugene Anspach, the Deputy Governor of the National Bank of Belgium, who has been for many years suffering from a collection of gall stones, which have kept him in a state of aggravated suffering (*douleur atroce*), and have latterly defied all measures of relief. M. Langenbusch, summoned specially from Berlin, proposed to lay open the gall bladder, with antiseptic precautions, admitting, however, that he had only performed this operation four times, and that but one of these cases recovered. M. Anspach's family and friends were much dismayed at this announcement, and begged that the operation should not be performed. M. Anspach was firm, and reflecting that without it he would not live long, and that in the meantime his life would be worse than death, decided on the operation. Even at this supreme moment the banking mind asserted itself, and M. Anspach remarked, "after all, one in four is 25 per cent., and that is a fine dividend." "You have had one recovery already, doctor," he remarked, "and I will be the second," an element of confidence which no doubt had something to say to the result. The operation was performed on the 9th September, and 125 calculi were extracted from the gall bladder. M. Anspach suffered a good deal after the proceedings, but is now out of danger and in complete comfort. We trust he will long live to enjoy the reward of his own pluck and of the skill of his surgeon. It is a curious circumstance that this operation has to a certain extent been anticipated here. The late Sir Timothy O'Brien suffered from gall stones, and the late Sir Dominic Corrigan worked down into the gall bladder by means of a potash issue, and removed them. Sir T. O'Brien's recovery was complete.

IODOFORM IN ERYSIPELAS.

There would seem to be no limit to the uses to which iodoform may be put in restoring the human form divine to its pristine vigor. In the May number of the *Practitioner*, Mr. Clark Burnam commends it for erysipelas. He used a solution of one part of iodoform in ten parts of collodion, and found that after a single application of this the pain and heat were relieved, and that the tendency to spread ceased. This good result could not be attributed to the internal treatment adopted nor to the collodion, because Sir James Paget expressly states that it does not check the spread of the disease.—*Lond. Med. Times.*

DOCTORS WHO DIED OF CHOLERA.

Of one hundred and thirty-nine physicians engaged in attending cholera patients in Naples under the White Cross Society, twenty died.

EXCESSIVE SWEATING.

Sponging the surface of the body with a solution of quinine in alcohol—one drachm to the pint —is now recommended for excessive sweating. It is a remedy that has long yielded us good results. —*American Practitioner.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

EDITORS:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. LOND

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MONTREAL, NOVEMBER, 1884.

THE MONTREAL GENERAL HOSPITAL.

At the quarterly meeting of the Life Governors of this Institution, held on the 12th instant, there was a very large attendance. This was in anticipation of the election of Drs. Gardner and Major, to the position respectively, of Gynecologist and Laryngologist to the Hospital, and also the election of two gentlemen to replace them on the Out door Staff. The candidates for these vacancies were Drs. Bell, Blackader and Campbell. To understand perfectly the situation it must be stated that it was necessary to pass new by-laws, creating two specialists, before Drs. Gardner and Major could receive the position of specialists which they desire. At the same time, it was intended to so amend the by-laws as to call the Outdoor Staff, Assistant Physicians and Surgeons. In August last, at the quarterly meeting, these amended by-laws were submitted. There was considerable opposition to their being passed at that meeting, not because of direct opposition to the changes proposed, but because it has generally been understood that the August meeting will not transact any but ordinary routine business. This tacit understanding was arrived at on account of the fact that so many Governors are generally absent from the city at that time. The Medical Governors were, however, in a majority at that meeting, and most unwisely, we believe, insisted on a vote being taken. They carried their point, and the amended by-laws were passed. To make them legal they require to be also passed by the Corporation of the Hospital. This body consists of all persons who contribute five dollars yearly to the Institution. The aforementioned by-laws, as they stood, were called [illegible] [illegible] meeting. In [illegible] no mention [illegible] Corporation [illegible] other than the Governors already [illegible] that body, at the proper time, [illegible] from Governors to members of Corporation, and the meeting so constituted proceeded to business. The amended by-laws were then submitted and passed. No one questioned the legality of the proceedings, and as the November quarterly meeting drew near the various candidates entered upon a most energetic canvas. We have already said that we believe the action of the Medical Governors in forcing a vote in August against the wishes of many of the Lay Governors was a mistake. The sequel proves that our opinion is correct. Their action was very generally discussed and as generally condemned. The result was that the evening previous to the November quarterly meeting Mr. D. A. P. Watt, a Governor of the Hospital, who has always taken a warm interest in the institution, notified the President, Mr. Andrew Robertson, that he would protest against any election taking place, upon the ground that the by-laws had been illegally passed. Mr. Watt held that the meeting of the Corporation was illegal, inasmuch as no provision was made in the by-laws of the Hospital for holding special meetings of Corporation. The President at once submitted the question to Mr. S. Bethune, Q.C., the Counsel of the Hospital, and only a few hours before the time the Governors were to assemble for the purpose of election, received his reply. This was read to the meeting, and endorsed fully the objection which Mr. Watt had raised. The President therefore ruled that an election could not take place, and the meeting very wisely endorsed his ruling. There was much disappointment of course on all sides, but the general feeling was that, in the face of the opinion expressed by Mr. Bethune, it would have been most unwise to have acted contrary to it. The large meeting then adjourned. The matter must lie in abeyance till next May, when the by-laws will again be submitted to the Governors and subsequently to the annual meeting of the Corporation. We have no doubt but that both these bodies will pass them.

While writing upon the Montreal General Hospital we may say that much surprise is

being expressed by many Governors that the resignation of Dr. Osler was not placed before them at the November meeting. Some even have stated their belief that his position is *de facto* vacant, inasmuch as he has accepted an appointment in another country, and has taken up his residence there. The fact is that Dr. Osler applied to the Committee of Management to allow his appointment to continue till May next, when it expires unless re-elected. The grounds upon which he asked for this favor, are, we think, hardly legitimate, but after the good service he has done the Institution they could not with good grace have refused the request. We think, however, Dr. Osler made a mistake in asking for it.

Some are inclined to think that other reasons than those named by Dr. Osler in his letter to the Committee induced him to ask the favor of his continuing on the Staff till May. One of these is believed to be the desire some of his late colleagues had to put off the election for his vacancy as long as possible. If the election had taken place in November, Dr. Campbell might have been elected. If it did not occur till May, it would give Dr. Campbell's opponents two chances of defeating him, he being one of the candidates for the vacancy on the Outdoor Staff which was presumed to occur in November; if successful then, they would have another chance against him in May, if he competed then for the Indoor position.

We believe the Governors of the Hospital are alive to their duty in its present condition, and propose doing it, fully and thoroughly. The Medical Staff, or at least most of them, have been running the Institution pretty much as they liked, and at this moment many of the Governors look upon them with anything but favor. It is an old saying, give a person sufficient rope and he will hang himself. The Medical Clique have taken plenty of rope—we warn them to take care they don't get their heads too far into a noose. It might suddenly tighten and strangle them.

"PEPTONIZED" COD-LIVER OIL AND MILK.

While the value of cod liver oil in pulmonary troubles is beyond question the fact is about equally well-established that the cases in which it is most clearly indicated are those least competent to assimilate or even tolerate an agent which calls for the exercise of full digestive activity to secure its effective action. To meet this difficulty many efforts have been made, with more or less success. In the preparation now offered us, however, we feel confident a great advance has been made. Not only is the oil peptonized, making its assimilation easy to even the most delicate stomach, but the taste— so intolerable to a great number of patients—is completely masked by compounding with it probably the best and most pleasant vehicle available, viz., milk. This latter is condensed *in vacuo* to about the specific gravity of the oil itself, and so thoroughly incorporated with it, by a new and original process—as to completely overcome the tendency to separation so characteristic of the ordinary emulsion. The therapeutic value of the preparation has been fully demonstrated by a three years' test in leading American hospitals, and by a mass of clinical evidence from individual practitioners. In Britain this preparation has been most favorably received, and we have no doubt that in Canada also it will have full and careful test at the hands of the profession.

GOLD MEDAL AWARDS TO UNITED STATES PRODUCTS AT INTERNATIONAL HEALTH EXHIBITION, LONDON, 1884.

Among the food products exhibited at the International Health Exhibition, London, 1884, from the United States, were *Beef Peptonoids* and *Maltine;* both of these preparations carried off the only Gold Medal and highest Award against numerous competitors in their respective classes. All food preparations were critically analyzed at this Exhibition by a jury composed of the best chemists in the country.

NÆVUS TREATED SUCCESSFULLY BY LOCAL APPLICATION OF LIQUOR ARSENICALIS.

Mr. W. J. Beatty, L.R.C.P., writes to the *British Medical Journal:* "In my hands it has succeeded admirably, my last eight cases having been cured perfectly and painlessly by the local application of this remedy. The preparation I use is the ordinary liquor arsenicalis of the Pharmacopœia, with which the nævus is to be painted night and morning until ulceration takes place: and I find that the cure is effected in from three to five weeks.—*Louv. Med. News.*

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NOTES ON TWO CASES OF LEAD POISONING.

By L. D. MIGNAULT, M.D.

Read before the Medico-Chirurgical Society of Montreal, December 12, 1884.

The above title will sufficiently explain that this paper is merely a brief record of two forms of this common affection which have come under my notice. The chief points of interest being to my mind in the extreme nature of the symptoms, and at the same time their ready yielding to therapeutic measures. The occurrence of lead poison and lead colic is by no means rare, but perhaps the sequences are not often met with in so marked a form as in the cases which I am about to relate.

Marie E. D., æt. 16, entered Hotel Dieu, May 1st, 1882. First saw her May 3rd.

She is a slender, emaciated girl, and complains of great debility, with colicky pains in the abdomen, and loss of appetite. At the same time she is unable to use either of her hands, even to dress herself, and they hang powerless at right angles whenever the arm is raised.

Upon examination there is a characteristic blue line along the gums, and tongue is heavily coated.

The extensor surface of the forearms, especially the right, is extremely wasted, in fact there is perfect flattening of the surface and no appearance of the usual fullness at the elbow, the atrophy resembling that of advanced cases of progressive muscular atrophy.

The flexor surfaces are also some wasted, as are also the muscles at the ball of the thumb.

On being told to seize any object with the fingers there is immediate flexion of the hand, and the fingers are thus prevented from closing upon the palm. As above stated, when the arm is raised, the wrist drop is most complete and characteristic, and the extensors are perfectly powerless to produce the slightest effect upon the hand.

Patient states that this present condition of affairs has lasted since Feb. 1st, when all symptoms were as perfectly characterized as at present.

Since then, and before that date, she has been under medical treatment, having been given iron and stimulating liniments to the arms, but all to no avail. These statements were borne out by inquiries among her relatives.

We had clearly here to deal with a case of *lead poisoning* of the most typical character, and I set myself to treat it accordingly.

I therefore prescribed laxatives, with 5 grains of pot iod. every four hours.

I at the same time applied galvanic electricity to the arms (app. goiffe), primary current.

At first and for one week the electric current seemed to have little or no effect, and no response was observed,—in fact the muscles were as insensible to the electricity as if the arm was lifeless. There was indeed degenerative re-action. Treatment continued all May. I state effects as noticed.

June 1st. There is now a marked effect; after a week the primary currents gave evidence of slight effect; the blue line is beginning to disappear, and the constipation is much relieved.

July 1st. Digestion and appetite perfect, and the muscles regaining power. The hands can be used to a certain extent. The effect of the current is most marked.

Discharged cured Aug. 31st. During this long period galvanism was used regularly, but tonics were given latterly. The patient was able long before her discharge to sew and make herself generally useful.

There are several curious points about this case: Firstly in its origin. This patient seems to have been poisoned by the use of certain pickles, all other sources of saturnism being excluded. A most careful enquiry eliminated any possibility of poisoning from the usual sources, as lead pipes, painting, etc. On being questioned, with a view of discovering if possible the source of the poisoning, she stated that she had eaten three times daily of certain prepared pickles, having been told to do so by a physician of her suburb as an appetizer.

She was positive that after a month of such diet she began to suffer from colic, constipation, and loss of appetite, and that soon after her hands began to grow weak, and her wrists to lose their power.

I have little doubt as to the origin of the *saturnism* in this case, for about the same time some of the same pickles gave rise to lead poisoning, and, upon being analysed, lead was found both in the pickles themselves and in the vinegar containing them. It is moreover a well known fact that acetate of lead is used in these condiments to impart freshness of color and other qualities.

Another interesting feature was the recovery of the case after so long a duration, and with such marked atrophy of the muscles. In looking over the ordinary text books we find it stated that such cases are generally hopeless as to prognosis, and indeed this case seemed in reality to be such, but, yielding as it did to therapeutic measures, was eminently calculated to encourage treatment in all cases, of whatever gravity.

The other case, Mde. B., æt. 30, admitted June 15th, 1882.

Has all symptoms of lead poisoning for 9 months.

At present there is a marked atrophy of the muscles of the posterior surface of the forearm, especially of the right side. She suffers moreover from great emotional troubles, being very despondent and spending most of her time in tears.

This case, under the usual eliminative treatment, rapidly improved and with galvanism was completely cured,

The peculiar feature was its similarity of causation with the other, this patient being also a great eater of pickles. At the same time her husband, who never partook of such articles of diet, was perfectly free from all such troubles.

Of the pathology of lead poisoning much may be said but little concluded. The digestive troubles are easily explained, but the palsy and other nervous symptoms are more difficult to locate. While it is certain that lead is found in most of the tissues in such cases, it is yet a question not only whether the muscles are the primary cause, but whether the trouble resides either in the peripheral nerves or in the anterior horns of grey matter. Dr. Wilhem Erle, of Leipsic, says: It appears indeed to be positively determined that the trouble is not situated primarily in the muscles, but is of neurotic origin; but whether the primary lesion must be sought for in the peripheral nerves (and in their motor fibres alone) or in the anterior gray columns of the spinal cord has not been definitely ascertained. The more recent observations which have shown a parenchymatous degeneration of the peripheral nerves, and negative appearances in the spinal cord favor the view of a peripheral lesion. Nevertheless I can not regard it as positively proven that the spinal cord is not primarily diseased. What can be proven by the *negative* results of examination with our present defective microscopical methods? *Gross* lesions cannot be looked for in a toxic process which usually recovers in a short time, and the *functions* of the anterior gray columns and their ganglion cells may be very markedly disturbed although no change can be demonstrated microscopically: And this disturbed function may produce degenerative atrophy of the peripheral nerves as readily as a primary affection of these tracts.

Society Proceedings.

OTTAWA DISTRICT MEDICAL SOCIETY.

The Annual Meeting was held in Ottawa on the 14th of November, when Dr. J. A. Grant delivered the annual address. After thanking the members for the mark of their confidence in again selecting him as President and his son as Secretary, he referred to the thirty years that he had practiced the profession in the city and the pleasantness that

had marked all his relations with fellow-practitioners. He upheld the good-will that should prevail in the profession and dwelt upon the value of societies as a means to this end, as well as for advancing professional knowledge—"Each Medical Society should be a centre of intellectual co-operation, comparing, strengthening, fortifying each "new idea, each ray of light, which may be thrown "on any obscure point, until it intensifies and "grows so as to be worthy of the recognition of "science." He was pleased to notice the growing importance of societies throughout the Dominion and the respect they commended in transatlantic centres of learning, and enlarged upon the benefits to arise from co-operation, especially if each one was to form a collective investigation committee.

The remainder of the address reviewed recent advances in the departments of medicine, physiology, pathology and therapeutics, and pointed out many points that required solving. He referred to the prominence and importance of the minute bacteria, the uncertainty of their cause and effect and the problem of their *modus operandi*; and hoped that the result of investigations would continue to be practical and useful, as far as the arrest of disease was concerned. Continuing he pointed out the result of recent investigations which placed the lymphatic fluids along side of blood as a factor in promoting health or disease, and the value of many discoveries in connection with their constituents, particularly leucocytes and albumen. In the field of therapeutics how few of the remedies in use were the result of scientific induction or the outcome of physiological or pathological inquiry, but the non-reliability of materia is daily decreasing by the careful and patient study of philosophical and physiological facts.

In conclusion he pointed out how much original work there was to be accomplished in carrying out the lines of thought, and what a credit it would be to Canada if the profession here were to accomplish its share: "We have an intellectual activity "of no low order, and with our native growth, "schooled at home and abroad, in the most pro-"gressive centres of Great Britain and Europe, "we naturally look for, and anticipate competi-"tive scientific enquiry into the complex opera-"tions of a system, which has thus far tested the "most acute observations in solving the problems "of life."

Dr. Hill, after making some complimentary remark, said that Koch had made some wonderful experiments as well as discoveries with regard to cholera. At present the death rate was about 50 per cent., which was that of older days, so its virulency had not been reduced. In former days he watched all cases of cholera without fear, but it was different with him now. He had noticed himself that the most rapidly fatal cases were those without vomiting or purging, the system collapsing at once. In 1832 we had it here, and so we ought to take sanitary precaution now. It would be well for the society to try anything new in treatment, as it had failed so far. Ice bags to the spine had been used, but it seemed to him the temperature was so low that this could only hasten the end. He then moved that the paper be published. Dr. Sutherland seconded the motion.

Dr. Sutherland proposed devoting a night to the discussion of sanitary matters, and that we have a combined meeting with the Board of Health. The city is in a bad state. The city engineer says that more now than twenty drains are properly trapped, and none of the house. The motion was seconded by Dr. Hill. Dr. Prevost consented to read the next medical paper.

Two new members were elected. Dr. Potts and Dr. F. Church, of Hull, P.Q.

Microscopical sections of tumors removed by some of the medical men were then shown.

DR. GRANT, Jr.

Sec. and Treas.

MONTREAL'S PROMINENT PHYSICIANS.

There are few cities of the size of Montreal to be found anywhere in which the medical profession, as a whole, stands so high, and where, in spite of local medical politics, there exists such universal good-feeling among them. This fact is an important one to society. No class of men, when in extensive practice, work harder, and none therefore requires a holiday more. Only think, three or four times every week, a busy Doctor is called out of his bed to attend to professional work. The period of disturbed rest may be only that required to drive a couple of miles—more or less—prescribe, and return. On the other hand, he may barely have retired, when his night bell rings out

its sharp summons, calling him to hours of waking and anxiety. To the best-natured Doctor in the world this is hardly a pleasant sound, especially if the day's work has made him limb and body sore. Has the reader never met, when on the way to business in the morning, some well-known Physician, wending his way homeward—his step slow, and his face wearied. While the rest of the world slept his mind has been active. He has perhaps heard every hour strike, since midnight, and night is *so* long. No one who has not sat by the side of suffering humanity can imagine how wearily the hours seem to pass, and how one longs for the sun to rise, and busy, bustling humanity once more set the world in motion. Hours of rest lost by a Physician are seldom regained. If he returns about the time his daily duty commences he goes to work just as if he had had his seven hours of refreshing sleep. Patients seldom think how difficult at times it is for a Physician to suppress a yawn, or keep his eye-lids from closing while listening to the unfolding of some thrice-told tale, and if perchance he fails, and sins, how ungenerous, to call him hard-hearted and unsympathetic. Winter is particularly a hard time for Doctors. Just fancy a night with the thermometer 15 below zero outside, with a sharp wind; inside 70 above zero, a difference of 85 degrees. A hardly pleasant kind of a night this on which to turn the Physician out of his warm bed. Again—a heavy snow storm is raging—the wind is travelling at 40 to 50 miles an hour and is cold and biting—not a pleasant companion to face—abroad, there is the sign of but one human being,—he who is in search of the Doctor—his foot prints in the deep snow mark the road he came. Tramp back both he and the Doctor must, for the streets are like the fields, level with unbroken snow, and no living creature is abroad save themselves. Many a night like this have our Montreal Physicians to meet. To those who toil thus—a good yearly holiday is due. Mind and body both require it, and the Montreal public cheerfully accord it. The *entente cordiale* which I have said exists induces, them willingly to attend the patients of absent friends—the attendance being as if made by the regular family Physician. I know of no other profession in which such generous treatment is accorded to its members, and no city in which it is more generously done than in our own fair city of Montreal. A brief sketch of a few of our leading medical men, may not prove uninteresting, so to the task.

First on the list stands :—

ROBERT PALMER HOWARD, M.D., L.R.C.S.E.

This gentleman has been about thirty-four years in practice. His first office was on McGill Street, near the corner of St. James St., and was very unpretentious. He has made three distinctive moves—as regard location,—First, to Bonaventure Street, then to Beaver Hall Hill, and lastly to the fine residence he at present occupies on Union Avenue. Almost from the time he began practice he has been connected with the Medical Faculty of McGill University—first as Demonstrator of Anatomy, and now, he occupies the position of Dean, and Professor of Practice of Medicine. He is a hard worker, and an enthusiast in his profession. Some think him stern, but those who hold this opinion do not know him, for beneath the professional air there is a genial soul, which enjoys the socialities of the world. His dinner parties, presided over by his amiable and accomplished wife, are said to be models of what such parties should be, and when the profession in Montreal are called upon to show their social side, he is always to the front. As a medical politician he can hardly, however, be called a success. He makes some good moves at times, but as a rule is apt to do too much, and herein lies his weakness. Take him all in all, however, he is a Physician of whom Montreal may well feel proud.

WILLIAM H. HINGSTON, M.D., L.R.C.S.E., D.C.L.

The manly, erect form of this gentleman is well known in the streets of Montreal. He is a good horseman, looks well in the saddle, and is a prominent member of the Montreal Hunt. For many years he had a large family practice, but of late has drifted almost entirely into Surgical work. He is a fine operator, and said to be a most excellent lecturer on clinical surgery—when he holds forth at the Hotel Dieu Hospital, of which institution he is one of the Surgeons. He was too long a bachelor, but is now a Benedict, with an excellent and charming wife. His social qualities are splendid, and no better chairman for a large public dinner party could be selected. He is a polished speaker—when put to the test, can round his sentences so that they sound well and read admirably. He has never taken a very active part in medical politics, and is hardly calculated to make a good politician. His course has perhaps therefore been

a wise one. He has a beautiful country residence, on the south shore of the St Lawrence, some thirteen miles from Montreal where he passes many of his summer evenings with his family. It is pleasant to see the Doctor at this charming spot, the centre of his happy circle, with professional restraint thrown aside, enjoying the rest such recreation gives. As a professional man his position could not be better, and he is well known to the leading medical men of the United States.

ROBERT CRAIK, M.D.

Of all the medical men in our city, none is more beloved by the profession than the man whose name heads this paragraph. When he was a Professor in McGill he was the idol of the students. Kind, generous, and open-hearted, he holds a warm place in the affections of those to whom he fills the position of Family Physician. With a proper amount of the professional air—so necessary some say—to ensure success, he can yet unbend, and as it were live once again his boyhood years. When in the company of his professional brethren, his opinion is always received with great respect. No man in the profession in Montreal is better suited to become their political leader, and at one time, it did seem as if the position would be his. But a variety of circumstances have induced him to retire from any active political work. This is I believe to be regretted, for his mind is peculiarly suited to the task. He is logical—therefore generally an able reasoner—and is honest, a trait that I believe is admirable in a medical politician. I am sure that his return to active political work would be hailed with delight by all his professional brethren ; his subsequent selection to the position of premier, would only be a matter of a very short time. He has a very extensive practice, he yet however finds leisure to look after his model farm situated only a few miles from Montreal, where he has an excellent lot of blood horses. For several years his horses took an active part in the racing field but as he was seldom present when they ran his success was not great, and he has, I think, wisely turned his attention in another direction. After a hard day's work it is the Doctor's greatest pleasure to drive out to his farm, and inspect his splendid stock, and that they are splendid is admitted by all who have seen them.

DUNCAN C. MCCALLUM, M.D., M.R.C.S.E.

This gentleman, like many a Scotchman and Scotch Canadian has done before him, selected a French Canadian lady, the daughter of a distinguished Judge—now deceased—for his wife. This fact has given him the entrée, to the best French Canadian Society in Montreal, and they have not been slow to appreciate his good qualities, and to many of them he occupies the position of Family Physician. I am of the opinion that he attends more leading French families—than does any French Physician in Montreal. He obtained his first introduction to this class when he became the assistant of the late Dr. Bruneau, which position he held for several years. That he turned it to such a good use proves that he possesses the characteristics of his race. The Doctor has also a large practice among the English-speaking people. He is under medium height, somewhat white-haired for his years, has a pleasant smile for all, and is generally considered good-natured. He was for years a Professor in McGill, and did good work there in his day. It is only a year since he retired, and the old students say they miss him, whom they somewhat familiarly used to style, "*Mickey Mac.*"

ROBERT GODFREY, M.D.

This gentleman is the only remaining link of the present generation with the past and is beloved by all. For forty years he has toiled at his profession, and the amount of good he has done during that time it is impossible to calculate. In figure above the average height, bald, with white fringe and pleasant features, he is the beau ideal of a gentlemanly Doctor. Long may Providence spare to us so good a man is my wish, echoed by hundreds of his patients.

GEORGE E. FENWICK, M.D.

This gentleman, who bears his years well, in spite of the chaffing of his friends at being the "late" Dr. Fenwick, is one of our prominent surgeons. He is a clear thinker—has good judgment—and operates well. Had he developed his specialty earlier in life he would doubtless have became a wealthy man. Competition in that line is, however, keen in Montreal, but my friend gets a good share of what is going. He is the essence of good nature, and is therefore liked by all. When he was Clinical Professor of Surgery at McGill he was considered a successful teacher. I think he made a mistake in leaving that chair, and taking Systematic Surgery. He does not shine as well in it as he did in the other, but still he *knows* what

he is teaching his students, and perhaps that is more than can be said of all professors in Medical Schools. Dr. Fenwick is Surgeon of the well-known Montreal Field Battery, and served with it during the two Fenian raids.

Francis W. Campbell, M.A., M.D., L.R.C.P. Lond.

This gentleman may be styled the leader of the Medical Opposition in Montreal. He was one of the organisers of the Medical Faculty of Bishop's College, was for twelve years its Registrar, and for two years has been its Dean. He possesses many qualities which peculiarly fit him for the position he occupies. He possesses an energy which enables him to accomplish an immense amount of work and in his vocabulary he knows no such word as fail. He is a capital organiser, a good speaker, and though at times he fights his opponents without gloves, giving some hard hits, he counts among his best personal friends his most bitter political enemies. He has an extensive practice, and is a general favorite with his patients. To his medical friends he is a marvel of work. For in addition to his College duties, and his city practice, and being the chief medical officer of the New York Life Insurance Co. in Canada, he finds time to take an active part in the social events of our city. He is a prominent officer and member of our Social and Dramatic Club. Like most men Dr. Campbell has hobbies. He is an enthusiastic salmon fisherman, and is president of a select club of five gentlemen who hold the fishing rights of the River Upsalquitch in N. B., as well as a considerable stretch on the famous River Restigouche. Dr. Campbell is also an enthusiastic military man. For twenty-three years he was medical officer of the Prince of Wales Rifles, but about a year ago was transferred to the Infantry School Corps—then organised by the Government, and now, therefore, holds the position of Surgeon in the Permanent Military Organization of the Country. He served with the Prince of Wales Rifles at Hemmingford and Durham, during the Fenian raid of 1866, and in 1870, during the raid of that year, was again with his regiment at Pigeon Hill and St. Johns. Perhaps the profession in Montreal owe him something in establishing the right of all to an annual holiday. Dr. Campbell is well known throughout the Dominion as its senior Medical Editor, being the Editor and Proprietor of the Canada Medical Record. He is a vigorous and ready writer.

Thomas Simpson, M.D.

A good Physician and a good man. He graduated at McGill in 1854, but did not settle in Montreal till about twelve years ago, since which time his progress as a practitioner has been steadily upward. His disposition is quiet and unobtrusive, and perhaps it is to this fact that some things to which I think he was entitled have passed into other hands. His patients speak highly of his kind attentions, and his friends admire his many excellent traits of character. He is chief Medical Adviser in Canada to the Equitable Life of New York, and he is a member of the Medical Faculty of Bishop's College.

Thomas G. Roddick, M.D.

Graduated at McGill College in 1868, and came here from Harbor Grace, Newfoundland. His collegiate career was a very successful one, and success has attended him ever since. He is Professor of Clinical Surgery at McGill, and largely, if not entirely, devotes himself to Surgery. Dr. Roddick may justly be styled a universal favorite with his confreres—all of whom appreciate his largeness of heart, and the enthusiasm with which he enters into all schemes for the benefit of the Profession. His disposition is lively, and he makes a most pleasant travelling companion. When he forms one of a delegation from Montreal to meetings of the Canada Medical Association he is the life of the party, and his hearty joyous laugh is most contagious. No one can continue to be dull in his company, for his very presence seems sufficient to inspire a feeling of hilarity. Such a man should be like sunshine in a sick room. Long may my friend be his own old self, for a better I do not wish to meet. I had almost forgotten to say that Dr. Roddick is at present President of the Medico-Chirurgical Society of Montreal.

George Ross, M.D.

Is also a graduate of McGill, and is now and has for some years been its Professor of Clinical Medicine. He began his medical career as a Surgeon on the Allan line of Steamships, continuing as such about six months. On retiring therefrom he became House Surgeon to the General Hospital, thence after a time into private practice. His *clientele* is numerous and influential. I think he has every reason to be satisfied with the way the world has used him, and I believe that he is. Dr. Ross is an excellent lecturer, and a fluent extem-

pore speaker, and fills most ably his clinical chair. I think, however, that he ought to make a determined effort to rid himself of the only drawback which attends his lecturing and public speaking. I refer to the efforts every few minutes at throat clearing. Remove this, and I would consider him a polished and *pleasant* speaker. He is the Senior Editor of the *Canada Medical and Surgical Journal*, and is a good writer.

THOMAS A. RODGERS, M.D.

I take him after my friend Roddick, for in disposition and many traits of character they are much alike. "Tom," as his intimate friends call him, has been a pronounced success, and it should be a proud satisfaction that this success is due to his own ability and energy. He commenced practice at Pt. St. Charles, in the midst of the Grand Trunk employes, and has built up a most extensive and lucrative practice. About a year ago, on the death of Dr. Scott, he was appointed Medical Officer of the Grand Trunk R. R., which position he now occupies. As I write I hear he intends removing his residence into the City proper. Dr. Rodgers has a good heart, and I have heard many a poor one, on the mention of his name, say "God bless him," to which I say, Amen. What better could I say for my friend.

ARTHUR A. BROWNE, M.D.

A perfect gentleman, both in looks and actions, and one who has quietly, and without fuss, built up a practice, of which there are not many better in our city. He has within a year or so succeeded Dr. McCallum in the Chair of Obstetrics at McGill. It is too soon to judge of his abilities as a Lecturer. I hope he will succeed, but a little more energy in this direction would make success certain. It does not follow because a man has been eminently successful as a practitioner that he will make a successful Lecturer. I do not say this to discourage, but simply that my friend may not lean too much on the former. Every one speaks highly of Dr. Browne, and I believe all said in his favor to be well deserved.

WILLIAM GARDNER, M.D.

Was for a number of years a Professor in Bishop's College; he subsequently accepted the same chair in McGill. For nearly two years he has devoted himself to the special department of Gynecology. Being supported in this move by the members of his Faculty, his success is certain. Dr. Gardner is perhaps the neatest man in the profession in Montreal, so pronounced at one time that his friends feared he would be a bachelor all his life. But they were mistaken, for he has been married several years, and has an amiable and charming wife. His habits of preciseness and neatness are his characteristics still. They are admirable qualities, and I regret to see that so few of our medical men possess them.

E. H. TRENHOLME, M.D.

Is mentioned next, for although not an out-and-out specialist, yet he has devoted special attention to the subject of Gynecology. On this branch he is, I believe, better known abroad than is any other man in Canada. He is Professor of Gynecology in Bishop's College Faculty of Medicine, and is a fearless operator.

GEORGE WILKINS, M.D., M.R.C.S.E.

Was one of the original members of the Faculty of Medicine of Bishop's College, and continued connected with it for over twelve years; he is now a Professor in McGill. He is a graduate of Toronto University, and was for a considerable time a Surgeon on the Allan Line. Dr. Wilkins is a very hard worker, and has taken much pride in microscopic work. For many years he carried on experimental physiological work in his own house, for which purpose he had to keep on hand a considerable number of rabbits, white rats, and frogs, pleasant inmates truly to have in one's house.

He has obtained a large practice, and is a sound and judicious practitioner. He is not however an elegant lecturer—having a somewhat hesitating delivery.

JAMES PERRIGO, B.A., M.D., M.R.C.S.E.

Few medical men in our city have made more rapid strides towards professional success than Dr. Perrigo, who is now in possession of a large and lucrative practice. It must be a source of proud satisfaction to him to know that this success is due to his own unaided efforts. It is proof that he deserves it. Dr. Perrigor is fond of a good horse, and generally has one in front of him. He is also an enthusiastic hunter. Cariboo has been his favorite game, although the last two years he has gone in for woodcock and partridge. I would suggest that it is time my friend was looking after higher game, which might lead him in the Benedictine line. I do not admire, particularly, bachelor Doctors, especially those of fourteen years standing.

Dr. P. is an original member of Bishop'sC ollege Faculty of Medicine, and holds now the chair of Surgery. He is considered a successful lecturer. He is also the Medical Secretary of the Western Hospital, to which Institution he devotes much attention.

JAMES C. CAMERON, M.D., M.R.C.P.I.

This gentleman, whose residence is in Belmont Park, possesses one of the, if not *the*, nicest office in the city. He has a large practice, yet takes an active part in what may be termed Medical life. He has been a member of Bishop's College Faculty for some years, and this winter lectures for the first time on "obstetrics." So far as I can learn, he is an excellent lecturer. He is also a good speaker, and sets forth his arguments with logical precision. He takes an active interest in the Medico-Chirurgical Society, of which last year he was one of the office bearers. He married a few years ago, the only daughter of James Dakers, Esq. The mansion in which he resides is one of the finest and most beautiful in Montreal.

GEORGE W. MAJOR, M.D.

My friend Major is now a specialist, and a good one I believe. I think he is to be congratulated on both these points. On the first, because it enables him to get fees, which makes the good old-fashioned family doctor's teeth water, and on the second because some specialists are humbugs. Dr. Major was for the first thirteen years of his life a general practitioner, and such men are generally the best specialists. He is also a bachelor. It has often struck me how many Bachelor Doctors we have in Montreal. At one time it was thought a Doctor should be married, but, judging from the success which attends our Bachelor physicians, such is not the prevailing opinion now. Still a wife is a good possession for any man to have, and I don't think Doctors any exception to the rule.

RICHARD A. KENNEDY, M.D.

Dr. Kennedy is a most conscientious practitioner, and has attained a large measure of success. His patients with good reason place great reliance on his judgment. His friends regret that of late years his health has been such as to necessitate that he should husband it. From this cause he had this year to cease active work in the Medical Faculty of Bishop's College, with which he has been connected from its organization.

FRANK J. SHEPHERD, M.D., M.R.C.S.E.

This gentleman is, I understand, devoting himself largely to Surgical practice, and since his connection with the General Hospital, now nearly two years, has shown that he is well qualified for such work. His position at McGill, and his family connections are sure to assist in his elevation. His present position is more than good, with every prospect of much advancement.

G. E. ARMSTRONG, M.D.

This gentleman may be styled "a pronounced success." Already he has as much to attend to as one man can conveniently look after. Such a measure of success does not come to any man unless he deserves it. The inference is that Dr. Armstrong deserves it, and I believe he does. He has a clear head, and a steady hand, which latter makes him peculiarly suitable for a Surgeon. He is one of the Attending Physicians to the Western Hospital, and is Professor of Physiology in Bishop's College. His weakness is a good horse, and he does not mind changing his animal as often as once a month, if in the change he thinks he is getting a better one. To have a horse which requires to be mastered is a fascination to him.

C. ALBERT WOOD, M.D.

This gentleman is a graduate of Bishop's College, and although not more than eight years in practice is already one of the busiest men in the city. He may be styled what is known as a bright man. In the suburb of the city where he resides he finds time to take a leading part in everything which tends to the elevation and amusement of its people. My friend is still a Bachelor. From some of the amusements in which I have lately seen his name figuring I don't think he can remain long so, or his heart must be harder than steel.

J. B. MCCONNELL, M.D.

A comparatively young man, giving good promise of ere long taking a leading position. His reputation of a Botanist is, I think, only excelled by one or two men in the Dominion. He is Professor of Materia Medica and Therapeutics in Bishop's College.

A. LAPTHORN SMITH, B.A., M.D., M.R.C.S.E.

Dr. Smith is the son of the Deputy Minister of Marine and Fisheries, and is among the rising young Physicians of our city. That he possesses determination of character was well illustrated by

his marriage recently, under circumstances then detailed in *Gossip*. The union I have every reason to believe will be a happy one, and the Doctor and his pretty bride have the good wishes of all his medical friends. He is one of the junior professors in Bishop's College.

HERBERT L. REDDY, M.D., L. R. C. P. L., M.R.C.S.E.

Is the son of the late Dr. John Reddy, and has an excellent practice. Being descended from Irish parents he possesses the ready wit of his race, As yet he is a bachelor, but rumor has it is not to remain much longer so, having secured the heart of one of Montreal's fair daughters. The sooner all is *ready* the better.

FRANK BULLER, M.D., M.R.C.S.E.

Devotes his entire attention to the eye and the ear, and has every reason to be satisfied with the return these two organs have given him since he came to this city. Coming here a bachelor, and his prospects good, many a pair of eyes, sent toward him their most bewitching glances, but the ears did not hear the wished-for words. From without our city came his bride, who is a welcome addition to Montreal society. He takes an active interest in all that tends to promote good feeling among the profession, and is a liberal contributor, when the Doctors make a "call." Dr. Buller is connected with McGill College.

ALEXANDER PROUDFOOT, M.D.

Is also a specialist on the eye, ear and throat, and has quite an extensive practice. He married a Boston lady, who has endeared herself to a large circle of friends here, and takes an active interest in many of our charitable institutions. The doctor does not roll himself up in his professional rug, and look at every thing with a professional eye. He enjoys the socialities of this world, and, with his wife, are welcome visitors at many of our household entertainments. He lectures on his specialities in Bishop's College.

My task is ended, I have tried not to be inquisitorial, and I have put down naught in malice. Towards all whose names I have mentioned I bear nothing but good-will. Medical men are a kind of public property, and the brief sketch which I have made of some of Montreal's prominent physicians, will, I trust, not be unwelcome reading to those who take *Gossip*.—*Montreal Gossip, Dec., 25, 1884.*

Progress of Science.

SURGICAL DELUSIONS.*

By JOHN B. ROBERTS, M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic.

Many surgical theories and procedures have become traditional, and are accepted as true and correct, merely because reverence for antiquity, or careless acceptance, has not questioned their right to be classed as surgical facts. The present age is an incredulous one, and demands accurate investigation of all such claims. The field of investigation is large, for progress has been retarded by the influence of theorizing writers, with monochromatic vision, the example of non-seeing and non-looking devotees of the fetiches of surgical superstition and the convincing effect of a repetition of false statements. I shall select a few topics which have greatly interested me, and concerning which I probably differ quite widely from many of you.

CHLOROFORM ANÆSTHESIA.

Many still cling to the delusion that chloroform is a safe anæsthetic, because they have never seen a patient die from it. Is one man's experience to weigh against the physiological, the experimental, the clinical experience of the whole world? Dare we employ chloroform, instead of ether, when recognized authorities state that in chloroform anæsthesia death occurs without warning in the hands of experienced administrators; when some five hundred deaths have already been reported; when Schiff and Dalton reject it in physiological laboratories, because of its mortality, when the Scientific Grants Committee of the British Medical Association assert that chloroform is a more dangerous anæsthetic than ether.

Adherence to chloroform in the face of such facts is criminal when circumstances permit ether to be obtained. The assertion that it is often impossible to produce anæsthesia with ether, is the result of inefficient methods of administration. Ether, if given as chloroform, is and should be given, is, in truth, a useless anæsthetic, but given properly it is efficient.

VALUE OF STYPTICS.

The belief in the necessity of styptics is a delusion less dangerous than that first mentioned, but it is given more extended credence. Such agents are seldom, probably never, needed in general

*An abstract of the address in surgery of the Medical Society for the State of Pennsylvania, for 1884.

surgery to arrest hemorrhage. When ligatures' torsion or acupressure is not demanded, and such is seldom the case, unless the artery is as large as the facial, moderate, direct pressure, applied in dressing the wound, is the only hemostatic required. Styptics often do harm, and, as they are not needed, they should be discarded.

Fatality of Small Hemorrhages.

There is much misapprehension about the quantity of blood that a healthy person may lose with impunity. Many who often look with equanimity upon a parturient woman losing a pint of blood from the uterine sinuses would be dismayed at a woman losing half or a quarter that amount during removal of a tumor. While not advocating needless waste of blood, and especially in patients suffering surgical shock, I assert that there is an unnecessary fear of blood spurting from a few insignificant vessels. The largest artery can be controlled by pressure not greater than is used for ringing the electric bell in your hotel. Hence there is always sufficient power in your fingers to obviate fatal hemorrhage until strings can be obtained and applied.

Danger of Trephining the Skull.

The dislike to make exploratory incisions in closed fractures of the skull evinced by some surgeons, and the objection of others to trephining, and thus opening the diploic structure in open fractures, are delusions of a most disastrous tendency. To wait until symptoms of cerebral compression or inflammation have supervened is to lose the most favorable opportunity for mechanical relief. Such a Fabian policy is often followed by death. The treatment of open and of closed fractures of the skull should not be looked upon as very different, since, with the present improved methods of dressing wounds, the successful issue depends almost entirely upon the cerebral rather than the cranial phase of the injury. If such fractures as are usually seen in the skull were not in proximity to the brain, the surgeon would consider them almost trivial. The feature of closed fractures that render them so troublesome is the obscurity that accompanies them. I have for a number of years strongly advocated making closed fractures open ones by means of an exploratory incision, whenever there is a suspicion of the existence of depression or splintering. In open fractures operation to elevate depressed portions and get rid of splinters of the inner table thrust into the membranes should be undertaken rather than avoided. It is better to err on the side of action than that of inaction Careful manipulation and proper dressings at an early stage are sources of less risk than is incurred by the surgeon who leaves unseen and unsuspected fragments thrust into the membranes or brain

Operative Delay in Strangulated Hernia.

A delusion of fatal issue is that leading to postponement of operative interference in strangulated hernia. Repeated attempts at forcible taxis and medical pow-wow-ing with temporizing measures have ended more lives than the use of the knife. Herniotomy done within twelve hours is almost always followed by recovery. Death is to be expected, however, if strangulation has existed for two or three days, and the gut has been bruised by violent manipulation in the endeavor to relieve the contraction by taxis. Moderate taxis under ether, a half day's treatment with cold applications and the internal use of morphia, and a second moderate attempt at taxis, followed, if unsuccessful, by immediate operation, is the sequence to be followed in strangulated hernia. When symptoms of strangulated hernia exist, the slightest fullness and tenderness in one groin over either of the rings is a sufficient localizing indication to warrant operation.

Operative Delay in Acute Phlegmonous Inflammation.

No insane delusion, no Spanish inquisitor ever caused so many hours of excruciating physical torture as the hallucination that acute abscesses and furuncles must not be incised until pointing has occurred. All the world knows that evacuation of imprisoned pus in phlegomonous inflammations means instant relief of the agonizing pain; yet how few of the profession early and freely incise such inflamed tissues unless they first see the yellow pus under the thinned skin or feel the fluctuation of the fluid in the abscess cavity. The pain is caused by the effort of the pus and sloughing tissue to escape. Is it not, then, more rational to make a free incision to-day than to wait till next week? Time and pain are both saved by early incision. If the cut is made before the pus has actually formed, so much the better.

Probably no form of abscess needs early and free incision more imperatively than that under the palmar fascia. Destructive burrowing of pus is prevented by this radical procedure, which also saves the patient many days of poultices and purgatory.

Operative Delay in Malignant Tumors.

Much bad surgery results from a delusive postponement of operative interference in malignant diseases. Instant removal is to be practiced in such cases, provided the patient is deemed fit to stand the surgical shock.

Necessary Fatality of Traumatic Tetanus.

That traumatic tetanus is of necessity fatal is a commonly-held opinion. Proper treatment is sometimes neglected because of this belief in its hopelessness. That the prognosis is extremely unfavorable I admit; but that cases of a severe type recover is undoubted. Chloral hydrate in

full doses has given the best results; but I do not propose speaking of therapeutics at this time. I merely wish to impress upon the profession the fact that a fair number of cases of traumatic tetanus have recovered.

Fatality of Pericardial and Cardiac Wounds.

The prevalent notion of the excessive danger of these wounds is delusional, at least in as far as it teaches that these structures will not brook surgical interference. The pericardial sac should be dealt with exactly as the pleural sac, by aspiration, incision, irrigation and drainage, according to the lesion. That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has been pretty well shown, though I am not prepared to recommend its general adoption for trivial cardiac conditions.

Symmetry of Normal Limbs.

Another delusion still existing in many minds is that the extremities are usually of the same length. Clinical and anatomical investigation show that asymmetry in the length of normal limbs is of common occurrence. Therefore, measurements of the legs in cases of fracture are of little value, since it is impossible to know whether it is the femur of a long or short leg that is the seat of the injury.

Usefulness of Treating Vicious Union of Fractures.

It is a fact, not sufficiently appreciated, that many cases of deformity, from imperfectly-treated fractures of long bones, can be remedied by refracture. Over and over again have I seen cases of great disability and deformity cured by the application of sufficient force to break the callus uniting the misplaced fragments. Five to six months is not too late to resort to this expedient for correcting what otherwise must be a life-long evidence of defective surgical attendance.

There are many other prevalent surgical delusions, such as that bony union of transverse fractures of the patella and of intracapsular fractures of the femoral neck cannot take place; that chronic purulent discharges from the ear do not need active treatment; that hypermetropia and hypermetropic astigmatism can be properly estimated and corrected without paralyzing the accommodation; that it is improper to perforate the nasal septum in cases of great deviation; that crooked noses are not amenable to treatment; that corneal operations and cataract extractions should be treated by cotton padding and bandages to the eyes; that fractures should be treated with carved or manufactured splints.

While an earnest advocate of conservative and of reparative surgery, I believe that when operative surgery is demanded it should be aggressive. Delay, indecision and insufficiency impair the value of much surgical work, and are often the legitimate result of a superstitious faith in delusive surgical dogmas.—*Buffalo Medical and Surgical Journal.*

EPILEPSY TREATED WITH HYDROBROMATE OF CONIA.

By R. Norris Wolfenden, B.A., M.B. Cantab.

Being frequently disappointed in the action of potassium bromide in the treatment of epilepsy, I have lately been trying a remedy which I believe has not previously been used for this complaint. If the result is not quite so favorable as I might have expected, it is at any rate sufficiently good to warrant further trial, and I venture to place on record the notes of seven cases, in the hope that it may lead to further observations. We have all experienced the failure of potassium bromide until poured in in such quantity that often a condition of bromism is established. The unsightly blotches thus produced are a source of annoyance, especially to the better class of patients to whom personal appearance is a matter of concern. The following is a summary of my notes.

Case 1. A., girl, æt. eight; ill for two years, with epileptiform seizure, consisting of sudden flexions of the fore-arm (right), and a momentary vacantness of look; latterly the attacks had become more severe, culminating in loss of consciousness. Hydrobromate of conia, in doses of half a grain three times a day, was prescribed. During the first week she had six slight "fits." The dose was then increased to 5-8 of a grain, and during the succeeding week she had no attack. The medicine was continued for four weeks, during which time she had no fits at all, and slept better. The drug was then discontinued for some weeks, when she returned for further treatment. During its administration this patient complained of constant frontal headache.

Case 2. B., male, æt. 22; suffered from true epileptic fits, with typical aura, convulsions, unconsciousness, and great headache afterwards. One and a half grains hydrobromate of conia was ordered twice a day; during the week, this patient had nine fits. One and five-eighth grains was given twice daily for a week. During this time the patient had four bad fits. He was now, at his own request, put under potassium bromide, 3 j doses, three times a day, which kept them under.

Case 3. C., female, æt. 34; had been ill for four years, with one or more fits every week, typically epileptic. While taking potassium bromide they were kept under. I ordered one grain of hydrobromate of conia twice a day to commence with. For a week she was better, with only one slight attack. The dose was increased to 1¼ grains, and during the next fortnight she had one slight fit. She was then ordered back to bromide.

Case 4. D., girl, æt. 7; has seven or eight fits a week of typical epileptic character. She has frequently right-sided convulsions, the right arm being suddenly flexed. Sometimes these culminate in a real fit, with insensibility and rigidity. The child is an imbecile. As while under 3 j doses of bromide, the child still had frequent fits, I ordered 1-4 grain of hydrobromate of conia three

times a day. For the first week she had five fits (all occurring the day after the medicine was changed). For the second week there were seven fits. The drug was increased to 1-2 grain three times daily. For a fortnight she was absolutely free from fits, and then had seven. The drug was continued for some weeks, but she still had fits occurring at irregular intervals, which were refractory both to conia and potassium bromide.

Case 5. E., female, æt. 27; has typical epileptic fits, which continue under 3 j doses of potassium bromide. I administered 1-2 grain of hydrobromate of conia three times a day. During the next week she had no fits, and stated that she felt better, but with frequent headache. For a month while under this treatment she had no fit, but complained of more frequent headache, in consequence of which I returned to bromide.

Case 6. F., male, æt. 18; would have three fits a day, and then go for a week without. They were typically epileptic fits. While under large doses of bromide they were kept under, but not until an unsightly bromide rash was established, which was troublesome to the patient. For the first week, while taking one grain hydrobromate of conia twice daily, he had three fits. For a fortnight longer while under this treatment he had two fits; during the whole three weeks he therefore had five typical epileptic fits. As he stated that the drug made him feel giddy and weak, I returned at his own request to bromide, which, so long as he was entirely under its influence in large doses, seemed to ward off his attack. This young man was of weak intellect.

Case 7. G., female, æt. 15; suffered from true epilepsy, dilated pupils; her optic discs were congested. She had not menstruated and had phthisical symptoms (cough, hæmoptysis, sweating). Half-grain doses of hydrobromate of conia were ordered three times a day. During three weeks she had no fit, which she stated was the longest time she had ever been without. I then lost sight of her.

The conclusions I draw from the treatment of these seven cases are—that the drug is undoubtedly serviceable in certain cases, and those in which it fails are cases of convulsions depending possibly on some gross lesion of the brain (cases 4 and 6). The slighter cases (*e. g.*, Cases 1 and 7) were distinctly benefited by it.

The drawbacks to the use of the drug appear in the complaints of headache, and where, in large doses, of giddiness lasting for an hour after taking it, with sometimes a suffusion and congestion of the conjunctivæ. In the doses in which I have given it there has not been noticed any cardiac or respiratory alteration. It is said that the dose of this drug must not exceed 4 1 2 grains in 24 hours, commencing with 1 1-2 grains. In my experience a child of eight bore 1 7-8 grains with only headache; a child of seven took 1 1-2 grains per diem. without any complaint; 2½ grains per diem were taken by a female without complaint; one adult man took 3 1-4 grains with impunity; in one case two grains per diem caused sickness, headache giddiness, and "weakness" in a man of 18. One and a half to two grains appears to be followed frequently by headache. I think the drug deserves further trial. Combined with constant application of the continuous current, I have successfully treated with it a case of hemichorea. In this disease, however, it would be rash to speculate whether the drug, the galvanism, or time was the most effectual in the cure.—*Practitioner.*

CLINICAL EXPERIENCE WITH THE NEW LOCAL ANÆSTHETIC—MURIATE OF COCAINE.

By Samuel Theobald, M.D., Professor of Diseases of the Eye and Ear in the Baltimore Polyclinic and Post-Graduate Medical School; Surgeon to the Baltimore Eye, Ear and Throat Charity Hospital.

Within the past two weeks I have had the opportunity of testing, in a variety of cases, the action of the new local anæsthetic, the muriate of cocaine. Although the published experience of those who had experimented with it led me to expect marvelous things of it, my expectations have been fully realized. So far, I have made use only of a two per cent. solution, and of this I have usually put into the eye (for my employment of it has been confined to ophthalmic surgery) two drops at intervals of five minutes, making three applications in all, and beginning the operation at the expiration of fifteen minutes from the first instillation.

The first case in which I tried it was one in which a foreign body was adherent to the cornea. Three applications were made in the manner described, and fifteen minutes after the first one the pupil was found to be semi-dilated, and the cornea completely anæsthetic. The foreign body was removed without patient feeling the slightest discomfort. Since then I have used it in two other cases of similar character, and in each the same perfect anæsthesia was obtained. In one of these the foreign body had been in the cornea for several days, and the eye was considerably inflamed and very irritable; but, although the needle was quite freely used to detach the somewhat deeply imbedded particle of iron, the patient showed that the operation was entirely painless.

Having occasion to remove a pterygium from the eye of a very nervous, timid woman a few days since, I made the usual three applications and was then able to perform the operation with perfect ease, the patient assuring me that she felt no pain whatever.

Among the first cases in which I employed it was one of acute inflammatory glaucoma, upon which it was necessary to perform an iridectomy.

In this case four instillations were made; but, owing to the cloudiness of the cornea, the chemotic condition of the conjunctiva, and the high tension of the eye, the drug was, probably, very imperfectly absorbed (the pupil showed no mydriasis), and the anæsthsia obtained was not complete. Still the operation was finished without difficulty, and the patient asserted that it caused very much less pain than she had suffered from an iridectomy previously performed upon the other eye without anæsthesia.

The division of a dense capsular opacity, by means of a needle-knife introduced through the cornea, was done under its influence with much satisfaction, though the manipulation of the needle was not entirely unattended by pain.

A canaliculus was slit up in a very nervous woman after three applications, and the pain attending it was certainly much less than usual.

Several concretions of cheesy matter were scraped from the cornea of a young girl after the usual three instillations of the solution, and the operation caused no pain whatever.

A man with badly lacerated lids required not only to have four stitches introduced, but also to have the edges of the torn tissue, which were to be brought in apposition, freshened with the knife, as the injury had occurred some days previously. Here the solution was not only dropped into the eye, but applied by means of absorbent cotton to the lids. The operation upon the lower lid, to which the cocaine was doubtless more thoroughly applied, was evidently attended by but little pain, although the introduction of two sutures was required; but that upon the upper lid caused decidedly more suffering.

Two days since I enucleated an eye under its influence, and obtained an astonishing effect from it, though I did not promise or expect complete anæsthesia. The introduction of the speculum, the seizing of the conjunctiva with the forceps, and its dissection from around the cornea seemed to cause the patient *no pain;* but the section of the external muscles and the division of the nerves back of the eye were evidently attended by severe pain, although the cocaine solution was several times dropped into the eye during the performance of the operation, and was gotten, to some extent, under the conjunctiva. Whether under such circumstances a stronger solution would produce a more satisfactory degree of anæsthesia is a question which, doubtless, will soon be determined. Probably it will not be practicable to obviate entirely the pain attending section of the ciliary nerves behind the ball; but by waiting for the bleeding to cease after dissecting up the conjunctiva, injecting the cocaine into the sub-conjunctival tissues; and waiting again a sufficient time for it to produce its anæsthetic influence there, it will doubtless be possible to cut through the muscular attachments of the eye without pain, and to complete the enucleation with but a trifling amount of suffering.

That in the treatment of inflammations of the eye, more especially of corneal affections, the cocaine will prove a most valuable agent, seems altogether probable, in view of the marked influence which it has been found to exert in controlling photophobia and ciliary irritation. I have already employed it in a case of extreme photophobia, blepharo-spasm and lachrymation—attending a relapse of granular conjunctivitis—with apparently marked benefit, the symptoms of ciliary irritation having almost entirely disappeared after ten days' use of the drug, a two per cent. solution having been applied to the eye four times a day. It should be stated, however, that in addition to the cocaine installations, a daily application of sulphate of copper was made.

Whatever cocaine may accomplish in other departments of surgery, the discovery of its anæsthetic influence upon the eye marks an era in the development of ophthalmology. It is an event the importance of which we can, as yet, scarcely appreciate. *Maryland Med. Gazette.*

NOTES ON THE USE OF HAMAMELIS IN THE TREATMENT OF VARICOSE VEINS.

Some time ago Dr. J. H. Musser called the attention of the profession to the use of hamamelis in the treatment of varicosed veins and their sequences. Since then numerous inquiries have been made of him concerning this drug, and several cases have been reported to him of its use. It has therefore been deemed advisable to again refer to this plan of treatment. In the first place, to determine this question it is important to know whether the beneficial results of the treatment of the cases previously reported were permanent or not.

The three cases noted in full in this paper have been under my observation ever since that time. The first two may be dismissed at once by saying neither of the patients has had any return of the varicose veins or of any symptoms of them. Regarding the third, who was to be present to-night, it will be remembered that, on account of the severity of his symptoms, he was unable to work for nine months prior to having taken the medicine, and for three months of that time he was treated in a hospital by rest, pressure, etc. He returned to work two months after, beginning the hamamelis, and has continued at his laborious occupation ever since. In answer to a summons he presented himself two weeks ago. He had not taken any medicine for ten months. There was no return of any one symptom of his disease, save the varicosity noted below and slight œdema of the left leg. The tissues, however, readily take on ulcerative action, for every time a stone fell against his leg an ulcer formed, with this difference from formerly, that it healed rapidly. On examina-

tion, two inches below the knee, on the inner aspect of the leg, a congeries of veins is found. They are not painful, returned during the past month, and have given him no trouble. The œdema of the ankle is not marked. There is a small healing ulcer on the right leg which was caused by a stone falling on the leg a month ago. Both extremities are very cold, on account of which he wears heavy stockings, and woolen material—articles that were unbearable one year ago. When the past sufferings of this man are compared with the comfort and usefulness of the past year, in view of the previous systematic treatment of him, it can scarcely be gainsayed that hamamelis is of value in varicose disease.

The subsequent experience of the writer has not been a large one, and only two patients can be referred to positively. But, in order not to present the facts alone of a probably prepossessed observer, the statements of numerous gentlemen will be given who have made use of the drug since the article referred to was published. It is, no doubt, natural that only the favorable cases have been reported to the writer—failures not being considered worthy of notice. There are some unfavorable comments given, however, and they will be first noticed.

Thus Dr. Dulles, surgeon to the dispensary of the University Hospital, writes as follows: "I tried it in a number of cases of leg-ulcer in the dispensary, and finally abandoned its use, because I came to the conclusion that it was only of moderate value, and could in no sense be looked upon as a substitute for the ordinary surgical methods of treating these ulcers."

Rather more favorable is the testimony of Dr. Stelwagon, chief of the Skin Dispensary of the same hospital. He says: "The remedy was made use of in about fifteen cases—in patients with eczema, ulcers, or both, in whom the veins were at all enlarged. In three instances the results seemed, both to the patients and myself, favorable. In four or five cases the patients thought some benefit had ensued; I could not convince myself that such was really the fact. In the remaining cases no improvement followed its use." In all the cases the roller bandage was employed. Dr. Stelwagon says his experience is negatively favorable, and the remedy is worthy of more extended trial. Of the six cases treated by Dr. Van Harlingen, professor of skin diseases at the Polyclinic, there was one quite successful case; two patients improved very much; the remainder made but two or three visits to the dispensary.

Still more favorable is the testimony to follow. Dr. R. M. Girvin reports two cases cured—no failures. One was that of a female with varicosity of the deep veins of both legs, with swelling and induration of the limb and spots of ulceration as large as a dime. The veins were enlarged and tender; the pain was intolerable. One teaspoonful of the fluid extract of hamamelis every four hours was ordered, and improvement was seen in three days; a cure in two weeks. No other treatment was used, and the patient was on her feet most of the time during the treatment.

Dr. Shelly, of Ambler, Pa., reports the following:

"Female, aged forty-five, cook, varicose veins in both lower extremities of fifteen years' duration, unhealthy ulcer on outer aspect of left ankle joint of ten years' duration. Ulcer followed a hæmorrhage, and never healed. Both legs œdematous, the left much indurated. Eczema around the ulcer. Pains so great she has been confined to her chair or bed for one month. Treatment: Hot bran baths and thin adhesive strips to her left limb only; hamamelis in teaspoonful doses five times daily. Relief almost marvelous, being about the house in one week, and three months afterware the knotted and distorted veins had entirely disappeared, notwithstanding the continuance of her laborious duties. The rubber stocking which she had used for years was discarded, and its use has not been resorted to."

To further illustrate the affinity this drug has for venous structures Dr. W. E. Hughes writes that a case of phlebitis, secondary to chronic Bright's disease, was entirely and rapidly relieved by the use of this drug.

These reports ought to be of some avail to convince the most captious. It is thus seen that positive and negative results are given. The accuracy of observation cannot be doubted, and hence conclusion can only be vitiated by two factors, the preparation used and the dose exhibited. It is difficult to make a numerical statement, and so it can only be said that this drug is a decided value in a certain proportion of cases of varicose disease. If an estimate were to be made of the proportion of cures and failures, without fear or exaggerating, it may be said that one-fifth of all cases are cured, and that one-third of the remainder are benefited.

THE VILLAGE DOCTOR.

How he makes it easy to die—the contrast between the busy city physician and the quiet country practitioner.

It may be that your finely educated and well informed city physicians know better what a sick man needs, but they do not begin to know as well as the old Oxford doctor what that sick man wishes. It may be that your beloved and well-brushed M. D. cures more diseases, but he has never learned how to make his patient forget the disease he cannot cure. Your city physician is a business man. He is always in a hurry. He yanks your door bell, startling you from a refreshing nap. He brushes by the servant who opens

the door to him, and comes into your bed-chamber with the air of a Constable whose duty it is to throw you and your family out into the street—a Constable who enjoys doing his duty because "business is business." He strides to your bedside and jerks your hand from under the coverings, as if it held something that had been stolen from him. You are afraid of him, and wish he would get through and go away. He orders you to put out your tongue much as a prosecuting attorney would if he expected to find some evidence of crime upon it. He flips out a massive gold watch that marks the quarter-seconds, counts your pulse, says you are a very sick man, and coldly tells you that if you have any business matters to settle you would better be about them. He orders your terrified wife to bring a spoon and a glass of water while he is directing a Latin prescription to his friend the druggist, who charges him no profit on personal purchases. He doesn't want the spoon and water; he only wishes to order somebody to do something, and these are the first things he thinks of. When he goes away as abruptly as he came you turn your face to the wall and think what a very great doctor this very great doctor must be, and you resolve to get well in order to get rid of him; and you do get well, either because you can't help it or because you can't afford to be sick any longer.

If you want a physician to cure your ills, the city M. D. will do. But if you want somebody whose warm sympathy will make you forget that you are sick, come here and try the old village doctor. He never rings a bell. Why should he, since he knows every nook and corner in every house in the village? He is, so to speak, a member of every family in Oxford, and a most heartily welcome member, too. With his little medicine case, containing a few staple drugs, not forgetting plenty of calomel and the necessary instruments for cupping, he enters at the back door as gently as the perfumed breath of a bright May morning. The figure may not be just the thing, for the doctor grooms his own horse, and his perfume is of the stable; yet there is something kind and sympathetic in his manner that seems to smell sweet to the soul. After his brief chat with the house-wife in the kitchen, he finds his own way to the little front bedroom, the wife following, wiping her hands and bare arms on the wrong side of her long calico apron. If his patient be asleep he stealthily tip-toes back to the kitchen and says he will wait. Seated on the door-step just outside the open door, he whittles, and talks in low tones with the wife as she goes on washing the breakfast dishes. Piece by piece he learns every symptom, every little particular of his patient's last night; and then, when the conversation ceases and the wife goes quietly up the narrow back stairs to make the children's little bed, the old doctor sits and peels long curly shavings off the yellow pine stick, softly hums a good old Methodist hymn, and thinks and thinks what he should do next for his sick man. Half the forenoon is gone when the good wife comes to the door and says, in same old subdued tone to which she has habituated herself: "Doctor, he is awake now." The old doctor slowly lifts himself, unkinks his stiffened joints, kicks his legs out to straighten down his trousers, shuts his big bone-handled knife, brushes the shavings from his shiny clothes, and goes to the bedroom. The sick man slowly turns his head toward the door way, smiles sadly, puts out his long, white, bony hand to him and whispers hoarsely: "Well Doctor?" which is a sick man's favorite form of asking how his doctor thinks he is getting along. The old doctor raises the blue paper curtain and slowly draws a chair close to the bed. "Oh, you're looking ever so much better to-day. We'll have you out hoeing potatoes in a day or two." The old doctor knows this is false: knows that no human power can prolong the man's life a month, but he is one of these great good men who live above the necessity of telling the truth on all occasions. Only the puny souled creatures who have to keep themselves in straight-jackets lest they do something wicked, need to live within the narrow limits of an inviolable rule always to tell the truth. "You're getting on nicely. Don't you see you've got more color in your hands? And your eye looks brighter than it has for a month. A very sick man couldn't sleep as you did this morning. Why, I've been here two hours, and you've been sound asleep and snoring every minute o' the time, ain't he, Mrs. Sanford?" The poor wife is almost afraid the doctor exaggerates, but there is something so wholesome in the old doctor's manner and so encouraging in his words that she quite forgets her troubles, and becomes even chirper in her efforts to assure her husband that the doctor is right. While the little woman moves softly about, gently dusting this and that piece of furniture, turning the shutters so that the sunbeams creeping toward the bed may not climb up and get into the eyes of the sick man, the old doctor urges on the conversation, adroitly turning the subject from sickness and trouble, and even from health and prosperity, with which the sick man might make painful comparisons. Soon the room is changed from a chamber of death and despair to a panorama of scenes pictured by the doctor in his relation of his recollections and experiences. The sick man turns his head to catch every word. He is an interested listener, while the old doctor sits there and relates as actual personal history a hundred and one things that never happened to any body. Why should he stop to ask himself whether truth is mighty so long as he can see that falsehood is prevailing over his patient's despair, and causing him to forget whether he is sick or well?

A writhing of the sick man's face and the placing of his thin, clammy hand upon the breast tells of a sharp pain. Quick, the opiate! There,

he sleeps! Now all is well. Ah, yes, he sleeps. He will not wake again. Death came to him as in a pleasant dream. He knew it not, and hence he died but once. Kind-hearted, warm old doctor! Dear old coward, who never fights disease, but surrenders at its first approach, and labors lovingly to smooth the way to death! Blessed old bungler, who gives no dying man the warning that would turn his latest hours to business cares and save his heirs a world of worriment and loss! Who does not love this Oxford doctor.—*Chicago News.*

THE TREATMENT OF PELVIC CELLULITIS FOLLOWING PARTURITION.

Dr. W. M. Graily Hewitt thus concludes an article in the *Med. Press.*

A few words with respect to the treatment: A remarkable feature in these cases is their tendency to chronicity. They are always tedious and difficult to cure, and the cure depends more on attention to diet than on any other element of the treatment. Rest, of course, is an essential; but the nutrition requires careful consideration. With regard to the subject of food: Deficiency of food may predispose to cellulitis in a patient in whom other factors in its cause may be present; or it may render an already-existing case of cellulitis less amenable to treatment. In the case before us the quantity of food taken was perhaps only one-third of the total amount required by the healthy subject. This created a weakness which showed itself in various ways. Under these circumstances there is great indisposition to take food, and if only three stated meals a day are provided, a very small amount is taken; the patient becomes exhausted in the intervals, and when meal-time comes is not able to take nourishment. Hence the quantity taken is not enough to induce activity in the nutrition process, but only enough to keep up a condition of *statu quo*. To stimulate nutrition, articles capable of ready assimilation must be selected—Brand's essence, beef tea, milk, etc., with a fair amount of stimulant in the shape of brandy, and this must be given very frequently, every hour or so. Under this treatment the appetite will rapidly improve, and in a week or so, in all probability, solid food will be taken with zest.

As subsidiary treatment, poultices may be applied to the abdomen to relive pain and assist resolution, and if the latter is very severe a little opium is indicated. The bowels should be daily opened by the administration of a mild laxative. Some medicine, in the shape of dilute nitro muriatic acid with a little tincture of orange, is often useful as a stomachic and tonic; and later on iron and quinine may be given with advantage.

THE TREATMENT OF PHTHISICAL NIGHT-SWEATS.

Many drugs have been recommended for this weakening accompaniment of phthisis, but comparatively few have given satisfaction. With the view of discovering some drug that would control the sweating, and at the same time that would be free from drawbacks, Dr. C. M. Cauldwell instituted a series of observations on a large number of cases. As a result he reports, in the *N. Y. Med. Jour.*, September 27, 1884, that picrotoxin recommended by Dr. Ringer and Dr. Murrel, more nearly approached the ideal in view than any of the other drugs. It was prescribed for twenty consumptives suffering from profuse night-sweats. In seventeen of the cases the perspirations were entirely checked, or so far diminished as to produce no further debility or annoyance. Even when given in much larger doses than are ordinarily prescribed, it caused no disturbance of the nervous system or of the gastro-intestinal tract—in fact, produced no evil effect whatever. In this respect it compared very favorably with atropine, ergotin, etc. A single full dose of the drug at bed-time was generally sufficient to control the sweating for twenty-four hours.

Where one dose failed, a second was taken shortly after midnight.

The initial dose, mentioned by Ringer and the English writers generally, is the one hundred and fiftieth of a grain. This was found much too small, and was accordingly increased to one-fortieth of a grain.—*Phil. Med. Reporter.*

MORE ABOUT BOILS.

In the *Reporter* of September 5, Dr. G. W. Barr, writing about boils, says: "All attempts to abort or prevent a succession of boils are unsatis factory."

Now, in reality, their abortion is easy and simple, if treated before there is any really dead tissue to slough out. My own plan is to cover thickly with absorbent cotton and keep it constantly saturated with spirits of turpentine. This will also always abort a felon, if used *early*. Now, to prevent their succession. Put a handful of bird-shot in a pint of sweet milk; boil it twenty or thirty minutes and take it for supper. Repeat this for three nights, then omit for three nights, and repeat. Then, if a tonic is needed, take ten to fifteen drops of elixir of vitriol three times a day, following each dose with two or three grains of quinine sulph. If Dr. B. will follow the above hints I am sure he will not prefix *un* to *satisfactory*. In place of vaseline I would advise him to use a paste of *resin soap, yolk of egg, brown sugar*, and *sweet oil*. Now, doctor, if you really feel that your reputation as a surgeon requires you to incise a boil *early*, select your *enemies*, incise freely, and fill the incision with carbolic acid or creasote, and cover with a poultice. For your friends, use the paste and wait till the boil is ripe.

CANNABIS INDICA IN MELANCHOLIA AND MENTAL DEPRESSION WITH SLEEPLESSNESS.

Dr. Wm. Strange, of Worcester, Eng. (*British Medical Journal*), has observed beneficial results from the use of cannabis in cases of melancholia and mental depression attended with sleeplessness. The usual dose he thinks is too small; at least a grain of the extract or twenty to thirty minims of the tincture should be prescribed ordinarily. This amount, combined with half a drachm or a drachm of bromide of potassium, rarely fails to give relief. It dulls the anxiety, lessens the depression, and gives restfulness if not sleep. If there be visceral disturbance, hyoscyamus acts well with the cannabis.—*N. Y. Med. Jour.*

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THE LYNAM CASE.

Since our last issue Dr. Vallée has made his official report, affirming Mrs. Lynam's partial insanity, and recommending her conditional release. She has been accordingly removed from the asylum by order of the Court, and consigned to the care of Mr. Alfred Perry, who has given the requisite security for her future good conduct. Thus ends for the present a *cause célebre*, which has stirred up public feeling to an unusual extent, and reflected little credit upon the Lunacy Regulations of this Province. Mrs. Lynam might have been discharged from the asylum long ago, trouble and expense spared, and sectional ill-feeling avoided, had the ordinary methods provided by law been adopted in her case. Dr. Perrault, the Asylum Physician, considered her sane from the time of her admission; had he, of his own accord or at the suggestion of Mr. Perry or any other friend of Mrs. Lynam, officially reported her fit for discharge, Dr. Howard would have liberated her at once, provided he agreed with Dr. Perrault; if he disagreed, he would have been bound by law to transmit Dr. Perrault's opinion along with his own to the Provincial Secretary, who would then have appointed a third expert to examine the patient and decide between the other two. Dr. Vallée, in all probability, would have been the expert selected; so that a fortnight could have accomplished precisely the same result as the three long months of legal wrangle. But then it is possible that the world in general, and Montreal in particular, might never have discovered the great philanthropic qualities of its "*Public Benefactor*," which no doubt would have been a *local*, perhaps a *national*, misfortune. But a still shorter and easier method was available; had Mr. Lynam been induced to made application to Dr. Howard for his wife's conditional release, she would have been allowed out on probation for one, two or three months; if at the end of that time no good reason existed to the contrary, she would have received her unconditional discharge. We are informed that, as a matter of fact, Dr. Howard proposed this method of procedure to Mr. Perry before legal proceedings were instituted. The direct appeal to the Court was never intended for general use, but was provided for those exceptional cases only in which the simpler methods had proved ineffectual. Mr. Perry's action in ignoring Government officers and ordinary methods of procedure and resorting to the cumbrous and expensive processes of the Courts was not only unnecessary but quite unwarrantable; while it is unquestionably true that an egg may be chipped with a huge steam-hammer, yet simpler methods are preferable when performing this common experiment.

Dr. Vallée's report is inaccurate, timid, hesitating and uncertain in its tone, and upon the whole decidedly unsatisfactory; it is not such a report as we would have expected from a man of his standing, and is hardly calculated to increase his reputation as an alienist. He states that there was no proof of hallucination; but if he had read the evidence carefully, he would have found clear proof of delusions concerning food, and concern-

ing voices "*many times*" heard speaking outside the window at night. He sees nothing strange in the fact that it has been found necessary to confine Mrs. Lynam in the refractory ward ever since her admission, and that, on the only occasion she seemed well enough to be transferred to the convalescent ward she behaved in such an unruly manner that she had to be removed to her old quarters within twenty-four hours. Nor does he find it extraordinary that she actually preferred living in the furious ward, because the cries and screams of the violent patients "*amused*" her and "*prevented her from feeling lonesome.*" The following extracts are interesting :

"I made her relate the circumstances of her incarceration, and she repeated to me all the details just as she had about given in court during her trial. Her husband had been jealous of her, and she on her side would have had reason to be jealous of him, but she had never complained of him, and in support of her statements on this point, she mentioned a number of facts and circumstances. This idea of jealousy appears fixed. She recurred to the subject quite willingly..... Whenever her husband was spoken of she became more or less excited and made statements at least *bizarres*. I expressed to her my surprise that the sight of her husband should have carried her to the point of insulting and cursing him. She replied to me that every morning and every night she cursed him. I said to her: "If you are liberated would you return to him or would you endeavor to meet him?" "No," she replied, "as long as I live I never wish to see him, but after my death I will visit him, in order to have my revenge on him;" and as I manifested some doubt on this subject, she added, with a sigh of strange conviction, "I know that I will return to satisfy my vengeance." In one of my later visits I announced to her that her husband was very sick, and that he was probably dying. She said to me that she wished to see him dead, but that, nevertheless, she preferred to die before him in order to come back and worry him. She admitted to me that her children had only their father to sustain them, and that his death would throw them into the street. Nevertheless, so hardly did she feel towards her husband that even this consideration did not interfere with her express desire to visit him after death. There is in this avowal an aberration of sentiment which is hardly explicable in a mother who loves her children as she pretends sometimes to loves them.....The following was established at the judicial enquiry: In the month of March, 1882, the husband of Rose Church went to her lawyer to consult him on the subject of a demand for *separation de corps*. He complained that the woman refused to look after his household, to take care of his children; that she was passionate and violent; that she tried to strike him with an axe; that she threatened to make a hole in the ice and drown her children. It was on this occasion that Dr. Howard went to her house and saw the woman for the first time. He found her in a veritable state of maniacal exultation, her hair and clothes disordered, the room turned upside down, the furniture thrown upon the bed, the children frightened and gathered up in a corner, afraid of the approach of their mother. The details of this striking picture are confirmed by Mr. Curran who accompanied Dr. Howard, and by the information which I obtained from the children. Now, if we attempt to ascertain the cause which has brought about this result it is difficult to reconcile a like scene with perfect soundness of reason. Still the impulsive movements are sufficiently frequent with Rose Church, and are provoked by the most insignificant causes. Thus her two little children told me that they had an instinctive fear of their mother, and that her laughter, even her caresses, did not reassure them, because there frequently came upon her a sudden transition without motive from a certain gaiety of humor to explosions of inexplicable anger. Do these passions at the mere sight of her husband offer or present the character of a simple outburst of passion? As they were seen by Drs. Ross and Cameron, who were witnesses, it is not very reasonable to impute them, in view of their great violence and instantaneous outbreak, to the influence of disease rather than to the calculations of the will. On the other hand, it is admitted that this woman is absolutely temperate and regular in her moral conduct. How, then, are we to explain her indifference to her duties. Her husband reproaches her for not working, for neglecting her house, and for not caring for her children. These facts have been confirmed by the little girls, and also implicitly by the woman herself, who admitted to me on different occasions that she spent a part of her day in sleeping. It often happened that she did not prepare any meals for the family, and then the father would go to his work

and the children to school without any food..... Is that woman insane or not?.....She does not present the signs of one of those ostensible insanities which accuse themselves by a great extravagance of conduct. On the other side, if I analyze the information that I have received by the trial, by my interviews, and by the other information obtained, I come to the conclusion that Rose Church is not abolutely sane. In all her faculties the extreme mobility of her impressions reflect the suddenness of her passions; the obliteration of her maternal sentiments shows that in that woman the affective faculties are evidently perverted on her husband's and her children's account.....I believe that it would not be prudent to force her husband to receive her, but I do not see any reason why she should not be liberated and placed in the care of any other person who wishes to take charge of her."

Dr. Perrault, the asylum physician, figures very badly in this case. In his evidence before the Court he swore that he never considered Mrs. Lynam insane: Nevertheless, upon two separate occasions he entered her name in the books as suffering from *erotomania*, and he never considered it his duty to report her officially to Dr. Howard for discharge.

Dr. Henry Howard, the Government Visiting Physician, has throughout this case been subjected to constant abuse and misrepresentation, which, being wholly unmerited, must have been very galling. We congratulate him upon the issue of the case; he has not only been personally exonerated, but his views have been in a large measure sustained, Mrs. Lynam being released conditionally as he had previously suggested.

The contradictory nature of the Medical evidence, and the somewhat unsatisfactory result of the trial, are, as usual, largely due to the absurd method of taking expert testimony in vogue in this province. Is it not high time for our legal brethren to revise their methods, and learn somewhat from the more rational procedure of France and Germany? Reform is urgently needed in many directions, and we sincerely trust that the strong public feeling, to which Mrs. Lynam's release is largely due, will not be allowed to die out till it has secured the thorough revision of the lunacy laws of this Province. If this good result can only be achieved the time and money expended upon Mrs. Lynam will not have been in vain.

AS OTHERS SEE US.

Mr. Lawson Tait, F.R.C.S.E., of Birmingham, whose visit to and address before, the Canada Medical Association at its meeting in Montreal in August last, will be remembered by many of our readers, has been enlightening his brethren at home in regard to what he saw on this side of the Atlantic. On the 31st of October last he read a paper, entitled "American Notes" before the Birmingham Medical Society. In the course of the paper he says:—

"From Boston I passed on to Montreal, where began the series of my engagements for the fulfilment of which my transatlantic visit had been arranged. The beauty of this city has been so often praised that it is useless for me to repeat the platitudes of my own impressions further than this, that in my memory there dwell above all others in prominence the recollections of three landscape views that I have ever seen; from the terrace at Malvern, from Arthur's Seat at Edinburgh, from the castle at Heidelberg, and last, but not least, from the hill at Montreal, from which extends a view all round and not surpassed by anything I ever saw. In Montreal I was the guest of Dr. Gardner, Professor of Gynecology in McGill University, and it was my privilege to give an address to the Canada Medical Association, the annual meeting of which had been arranged to take place during the three days just preceding the meeting of the British Association. My business here, of course, is chiefly with what I saw and not with what I said; but I wish again, here in my own land, to repeat my acknowledgments of the brilliant reception given to me by my Canadian brethren, not so much on my own account as for the position in which they placed me, that of a representative for the time being of British surgery.

During those three days I was associated with some three hundred practitioners of medicine. I heard a number of papers read, with discussions upon them, and I say, without hesitation, that nothing which was said or done at that meeting but would have reflected credit on any medical gathering in the world. I often hear it said by practitioners in this country, whose lots are cast in places remote from the busy centres of life, that they find it difficult, or even impossible, to attend meetings of professional societies, and to keep themselves abreast with the growth of the science of medicine and surgery; but in that new country

and at that Congress I found men eager and able to be present, though they had thousands, instead of scores, of miles to travel, and it was to me quite impossible to realize the fact that men who sat next me, and who talked fluently and well of the most recent advances in pathology, who knew all the dodges and newest things in laryngology, etiology, and gynecology, practised in villages four, five, or even six days' travel from the place of meeting; that many of them existed in places still unmarked on the map, without any professional neighbor nearer than perhaps a hundred miles. Some of them were even professors in flourishing medical colleges, placed in large cities, which ten or twelve years ago had no existence. In the style, character, and conversation of these men, not only could nothing be detected which could mark them as being defective in general or professional culture and education, or which could place them in a rank lower than the practitioners of my own country, but I doubt very much if, from the highest to the lowest in our own ranks we were to take 250 or 300 of our men at random we could compare favorably with them.

Another source of surprise was the large number of medical schools. Thus, in Montreal, a city of 140,000 inhabitants, there are no less than four of these schools—two Catholic and two Protestant—and, although there is only one of great importance, still all of them are well-officered and well-appointed, and, from what I could see of the results of their training I am unable to say that any of them can be charged with inefficiency. In Toronto there is a magnificent university, the president of which is the famous archæologist, Daniel Wilson, and two medical schools, the buildings of both of which I inspected with care, and I venture to say that they compare very favorably with the school in our own town, or indeed with any provincial medical school, as well as with a large number of our metropolitan schools. The tendency toward the downward competition which would otherwise be inevitable in medical education is prevented by the establishment of that which we most of all want in this country—a guarantee on the part of the State of a minimum amount of medical education.

Of the hospitals of Canada I can say nothing but what is favorable. Dr. Hingston, the distinguished surgeon of l'Hotel Dieu, and others, took great trouble to show me all their details. Their appointments are equal in every respect, and in some respects are far superior to those to be seen in any but the newest hospitals in this country. I spent a long afternoon in the hospital at Toronto, and I saw there the results of surgical work as brilliant as any to be found in Great Britain."

COMMITTEE ON ORGANIZATION OF THE NINTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN WASHINGTON, D.C., IN 1887.

PRELIMINARY NOTICE.

The Committee on Organization of the Ninth International Medical Congress, to be held in the United States in 1887, met in Washington, D. C., on November 29, 1884, for the determination of the general plan of the Congress, the election of Officers of the Committee, who will be nominated to fill the same offices in the Congress, and the consideration of questions of finance.

The following rules were adopted:

1. The Congress will be composed of members of the regular medical profession who shall have inscribed their names on the Register of the Congress, and shall have taken out their tickets of admission. As regards foreign members, the above conditions are the only ones which it seems, at present, expedient to impose.

The American members of the Congress shall be appointed by the American Medical Association by regularly organized State and local medical societies, and also by such general organizations, relating to special departments and purposes, as the American Academy of Medicine, the American Surgical Association, the American Gynæcological, Ophthalmological, Otological, Laryngological, Neurological, and Dermatological Societies, and the American Public Health Association, each of the foregoing Societies being entitled to appoint one delegate for every ten of their membership.

The members of all special and subordinate Committees, appointed by the General Committee, shall also be entitled to membership in the Congress, together with such other persons as may be specially designated by the Executive Committee.

All Societies entitled to regresentation are requested to elect their Delegates at their last regular meeting preceding the meeting of the Congress, and to furnish the Secretary-General with a certified list of the Delegates so appointed.

2. The work of the Congress is divided into eighteen Sections, as follows, viz:

1. Medical Education, Legislation and Registration, including methods of teaching and buildings, apparatus, &c., connected therewith.
2. Anatomy.
3. Physiology.
4. Pathology.
5. Medicine.
6. Surgery.
7. Obstetrics.
8. Gynæcology.
9. Ophthalmology.
10. Otology.
11. Dermatology and 18. Diseases of Children. Syphilis.
12. Nervous diseases and Psychiatry.
13. Laryngology.
14. Public and International Hygiene.
15. Collective Investigation, Nomenclature, and Vital Statistics.
16. Military and Naval Surgery and Medicine.
17. Experimental Therapeutics and Pharmacology.

3. The General Meetings will be reserved for the transaction of the general business of the Congress and for addresses or communications of scientific interest more general than those given in the Sections.

4. Questions which have been agreed upon for discussion in the Sections shall be introduced by members previously nominated by the Officers of the Section. The members who open discussions shall present a statement of the conclusions which they have formed as a basis for debate.

5. Notices of papers to be read in any one of the Sections, together with abstracts of the same, must be sent to the Secretary of that Section before April 30, 1887. These abstracts will be regarded as strictly confidential communications, and will not be published until the meeting of the Congress. Papers relating to questions not included in the list of subjects suggested by the officers of the various Sections will be received. Any member, after April 30, wishing to bring forward a subject not upon the programme, must give notice of his intention to the Secretary-General at least twenty-one days before the opening of the Congress. The Officers of each Section shall decide as to the acceptance of any communication offered to their Section, and shall fix the time of its presentation. No communication will be received which has been already published, or read before a Society.

6. All addresses and papers, read either at General Meetings or in the Sections, are to be immediately handed to the Secretaries. The Executive Committee, after the conclusion of the Congress, shall proceed with the publication of the Transactions, and shall have full power to decide which papers shall be published, and whether in whole or in part.

7. The official languages are English, French, and German.

No speaker shall be allowed more than ten minutes, with the exception of readers of papers and those who introduce debates, who may occupy twenty minutes.

8. The Rules, Programmes, and Abstracts of Papers will be published in English, French, and German.

Each paper or address will appear in the Transactions in the language in which it was delivered by the Author. The debates will be printed in English.

9. The Officers of the General Committee on Organization are a President, three (3) Vice-Presidents, a Secretary-General, and a Treasurer, and those elected to these positions will be nominated by the General Committee to hold the same offices in the Congress. All vacancies in these offices shall be filled by election.

10. There shall be an Executive Committee, to be composed of the President, Secretary-General the Treasurer of the General Committee, and of four other members, to be elected by the General Committee. The duties of the Executive Committee shall be to carry out the directions of the General Committee; to authorize such expenditures as may be necessary, and to act for the General Committee during the intervals of its sessions, reporting such action at the next meeting of the General Committee.

11. There shall be a Standing Committee on Finance, composed of five members, to be appointed by the President, subject to the approval of the Executive Committee.

12. Those who are elected as Chairmen of the several Sections shall be thereby constituted members of the General Committee.

The Officers elected are as follows:

President.—Dr. Austin Flint, Sr., of New York.

Vice-Presidents.—Dr. Alfred Stille, of Philadelphia; Dr. Henry I. Bowditch, of Boston; Dr. R. P. Howard, of Montreal, Canada.

Secretary-General.—Dr. J. S. Billings, U. S. Army.

Treasurer.—Dr. J. M. Browne, U. S. Navy.

Members of the Executive Committee (in addition to the President, Secretary-General and Treasurer.)—Dr. I. Minis Hays, of Philadelphia; Dr. A. Jacobi, of New York; Dr. Christopher Johnston, of Baltimore; Dr. S. C. Busey, of Washington.

The Executive Committee will proceed at once to complete the work of organization.

J. S. BILLINGS,
Secretary-General.

WASHINGTON, D.C., Dec. 1, 1884.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROVINCE OF QUEBEC.

Mr. de Lamirande, the detective officer of the College, furnishes us with the following result of actions against unlicensed practitioners, rendered since September last.

—College *vs* Théodore D. Whitcher, Beebe Plain, two cases, in which defendant confessed judgment, paid fines and costs.

—College *vs* Gabriel Courchêne, bone-setter of La Baie du Febvre. Two cases were taken against him, he has contested both cases, and he was condemned to pay fines and costs in both cases.

—College *vs* Eugène Ratelle, barber, of Montreal. He contested, and was condemned to pay fine and costs.

—He also states that Dr. John Burke, of Stanstead, has left the Province of Quebec not being able to qualify, and being threatened with prosecution.

THE MEDICAL RECORD VISITING LIST.

This Visiting List, published by Wm. Wood & Son, of New York, proprietors of the New York *Medical Record*, has been received. It is really a very elegant memorandum book, and embraces everything required in a Visiting List. We look upon the flexible character of the cover as being a feature which will commend it to many.

PERSONAL.

Dr. J. F. T. Jenkins has settled in Riverside, Southern California. His residence in Richmond square, Montreal, has been taken by Dr. Airth.

It is rumored that one of the candidates for the vacant position in the City Council representation of St. Ann's ward will be Dr. Kannon of Notre Dame St.

REVIEWS.

"*Edmond Dantes,*" the Sequel to Alexander Dumas' great novel, "The Count of Monte-Cristo," is one of the most wonderful romances ever written, and an entire new and enlarged edition of it is in press, and will be published in a few days by T. B. PETERSON & BROTHERS, Philadelphia. Just at the point where "The Count of Monte-Cristo" ends, "Edmond Dantes" takes up the fascinating narrative, and continues it with marvelous power and absorbing interest unto the end. Besides the hero, Haydee, Mercedes, Valentine de Villefort, Eugenie Danglars, Louise d'Armilly, Zuleika (Dantes' daughter), Benedetto, Lucien Debray, Albert de Morcerf, Beauchamp, Chateau-Renaud, Ali, Maximilian Morell, Giovanni Massetti, and Esperance (Dantes' son) figure prominently, while Lamartine, Ledru Rollin, Louis Blanc and hosts of other revolutionary leaders are also introduced. "EDMOND DANTES" will delight all who read it.

Sexual Neurasthenia (*Nervous Exhaustion*) *its Hygiene, Causes, Symptoms and Treatment, with a Chapter on Diet for the Nervous.* By GEORGE M. BEARD, A.M., M.D. (Posthumous Manuscript.) Edited by A. D. Rockwell, A.M., M.D. New York: E. B. Treat, M.D., 1884. Price $2.

The late Dr. Beard was a prolific writer, who had the courage of his convictions, and therefore never hesitated to give expression to them, either through the press or, when opportunity offered, *viva voce*. He was generally believed by many in the profession to be extreme in some of his views, but his honesty was never doubted. His treatment of the special class of cases on which this book is written was often heroic and much criticised. It may, however, in the near future prove not to have been more heroic than was necessary. It is generally admitted that the late Dr. Beard, and the editor of this work, who was also his fellow-worker and colleague, were the first to enunciate the idea that electricity was a

powerful constitutional tonic, as well as a stimulator and excitor of paralysed muscles. The work is written in a bold and flowing style, and breathes throughout a spirit of purity which makes it pleasant reading. Cases of sexual exhaustion deserve far more consideration at the hands of the profession than they are in the habit of receiving. If this attention was given to them they would not fall in such numbers into the hands of the Quack, who reaps from them a rich harvest of fees. This book is calculated to awaken in the mind of the thoughtful reader a deep interest in the unfortunate victims of "Neurasthenia." If Dr. Beard had written nothing but this work, he would not, we believe, have lived his short life in vain.

Bacteria and the Germ Theory of Disease. By Dr. H. Gradle, Professor of Physiology, Chicago Medical College. Chicago: W. T. Keener, 96 Washington street.

This book contains eight lectures delivered at the Chicago Medical College, and they give a really very excellent resume of the whole subject.

A Practical Treatise on Surgical Diagnosis Designed as a Manual for Practitioners and Students in Medicine. By Ambrose L. Ranney, A.M., M.D., Professor of Practical Anatomy in the New York Postgraduate Medical School. Third edition, thoroughly revised, enlarged and profusely illustrated. New York: William Wood & Co., 1884.

This, the third edition, is very much increased in size over previous editions. This is due to the addition of two chapters on diseases of the brain and spinal cord and their envelopes, which certainly help to enhance the value of an already very valuable book. Quite a number of new illustrations have been added, some of them original, but the majority taken from well known surgical works. Dr. Ranney's work is recognized as a text book in many medical schools. It deserves to occupy a similar position in all of them. It is a work which should be found on the shelf of every surgeon and general practitioner.

A Manual of Bandaging Adapted for Self-instruction. By C. Henri Leonard, A.M., M.D. With one hundred and thirty-nine engraving—Second edition revised and enlarged. Detroit: Published by the Illustrated Medical Journal Company. Price $1.50.

This little work, of about one hundred and sixty pages, is eminently practical in its character. There does not seem to be a superfluous word in all its pages, and the various descriptions are given with much clearness and distinctness. The illustrations are admirable, and of course assist materially in fully comprehending some of the uncommon and rarely-used forms of bandaging. A chapter which will be read with profit is the one on the preparations of the various forms of poultice—while the chapter on strapping gives much valuable information. All these subjects are of course taught in Medical Schools, and practically illustrated by Clinical Professors, but little about them is to be found in systematic treatises, and even in works on minor surgery they are treated with much briefness. This book, it seems to us, supplies a want in our Surgical literature, and we therefore commend it to the attention of our readers.

A Text Book of Practical Medicine, designed for the use of Students and Practitioners of Medicine. By Alfred Loomis, M.D., LL.D., Professor of Pathology and Practical Medicine in the Medical Department of the University of New York, Physician to Bellevue Hospital. With two hundred and eleven illustrations. New York: Wm. Wood & Co.

Dr. Loomis is known to the profession principally by his admirable work on Physical Diagnosis and numerous contributions to the Medical Press of New York city. The latter have found him an admirable observer of the practical points in the history of Disease. A systematic work on the Practice of Medicine from the pen of such a man naturally receives, or should receive, a hearty welcome at the hands of his professional brethren; and that this work will receive such a reception we have not a shadow of doubt. It is elaborate, and yet, withal, concise, and the style is pleasant, if such a term may be used in speaking of a work which deals with the various medical diseases to which the human family is subject. The volume consists of eleven hundred pages, and is divided into six sections as follows: Sect. i. Diseases of the Respiratory Organs. Sect. ii. Diseases of the Digestive System, including those of the Liver, Spleen and Pancreas. Sect. iii. Diseases of the Heart, Blood-vessels and Kidneys. Sect. iv. Acute General Diseases (this includes Miasmatic Contagious Diseases, Acute Contagious Diseases, and Malarial

Diseases) Sect. v. Chronic General Diseases (General Diabetes, Anemia, Chlorosis, Scurvy, Purpura, Alcoholism, Syphilis, etc., etc.). Sect. vi. Diseases of the Nervous System, including Diseases of the Brain, Spinal Cord, and Functional Nervous Diseases. All these various sections are illustrated to a very large extent, and we have to confess that we do not place the same value on them which the author seems to do. Doubtless to those connected with hospitals in cities, where *post-mortems* are obtainable, the illustrations will prove very valuable, but the bulk of the profession cannot get post-mortems, and even if obtainable have not had that education which enables them to easily recognise obscure pathological conditions. To the bulk of the profession, therefore, most of these illustrations are not of any special value, while they increase the size of the book considerably. A work on Practical Medicine does not need illustrations to make it valuable, and Dr. Loomis' work has quite sufficient in its admirable arrangement and clear descriptions to commend it to the profession without the addition of the large number of wood-cuts scattered throughout it. We say this from a fair knowledge of the work, which has been in our hands for a couple of months. We have consulted it whenever we felt it to be our duty to consult a work on Medicine, and have always felt satisfied with the information we obtained. In matters of medical treatment works by American authors are especially valuable to all practitioners on this continent: there are now-a-days so many remedies which we might say are peculiar to this side of the ocean, and works by English authors do not, as a rule, mention them. To have one or more volume by American authors in our library is a matter of necessity. We are glad, therefore, to notice that Dr. Loomis fully gives *all* the treatment followed on this continent. To any one wishing to add a work on practice to those they already possess we can heartily recommend this volume It is printed with type which gives a very clean impression, and the entire get-up of the work is such as to do credit to its publishing house.

Woods Medical Library: A Manual of Diseases of the Throat and Nose. By MORELL MACKENZIE, M.D., London.

This is the August issue of the Library volume. The reputation of its author is such as to commend it for acceptance to the thousands who now have subscribed to this Library,

A Text Book of Pathological Anatomy and Pathogenesis. By ERNEST ZIEGLER, Professor of Pathological Anatomy in the University Tübingen.

This is the September issue of the Wood Library. It is an excellent treatise on its subject, and will be acceptable to many; is a little too heavy, we fancy, for the bulk of subscribers, who must be very busy country practitioners—something more practical, we fancy, would be more to their taste. Still we suppose it is hard to publish *practical* works every month in the year and keep it up for several years.

Auscultation, Percussion and Urinalysis: An Epitome of the Physical Signs of the Diseases of the Heart, Lung, Liver and Kidneys. Edited by C. HENRI LEONARD, M.A., M.D., Professor of the Medical and Surgical Diseases of Women and Clinical Gynæcology, Michigan College of Medicine. Fully illustrated; Cloth, 16mo, 166 pages, post-paid, $1.00. Detroit, Mich., 1884, The Illustrated Medical Journal Co., Publishers.

CONTENTS :—CHAP. I.—*Topography of the Chest*, Anterior and Posterior. CHAP. II.—*The Physical Diagnosis of Diseases of the Respiratory Organs.* CHAP. III.—*Diagnosis by Percussion;* Percussion in Health and Disease. CHAP. IV.—*Auscultation of the Chest*, in Health and Disease; also of Voice, Cough and different Rales. CHAP. V.—*On the Sputa*, Microscopical and Macroscopical, with a brief Histology of Lung Structure. CHAP. VI.—*Diseases of the Lungs;* their Pathology and means for Physical Diagnosis. CHAP. VII.—*On the Pulse*; its Rate, Rhythm and Sphygmography. CHAP. VIII.—*The Heart;* its Regional Anatomy, Area of Dullness on Percussion in Health and Disease. CHAP. IX.—*Auscultation of the Heart*; the different Cardiac-Murmurs and their Indications of Disease. CHAP. X.—*Diseases of the Heart;* their Pathology and Physical Signs. CHAP. XI.—*The Liver;* its Regional Anatomy, Histology, and Physical Signs of the different Diseases. CHAP. XII.—*The Spleen;* its Regional Anatomy, Histology, and Physical Signs of Disease. CHAP. XIII.—*The Kidney;* its Regional Anatomy, Histology, Pathology and Symptoms of different Diseases. CHAP. XIV.—*Urinalysis, Chemical and Microscopical;* prepared specially for this work by WM. H. ROUSE, M.D., Ph. C. CHAP. XV.—*Bacteria, Bacilli, Micrococci, Vibriones, and Spirillæ;* their Growth, Microscopy, and Agents destructive to them,

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THE TREATMENT OF OPIUM ADDICTION.

By DR. J. B. MATTINSON, BROOKLYN, N.Y.

Read before the American Association for the cure of Inebriates, Oct. 22, 1884.

Several years have passed since the writer had the pleasure of reading before this society a paper on the subject of opium addiction.

During this time his professional attention has been largely, and, of late years, exclusively devoted to the study and treatment of this toxic neurosis, and, with increasing experience has come improved therapeutics, all of which warrant him in again inviting attention to a topic, that, though accorded but little thought by the profession at large, possesses a great and growing importance, the extent of which, perhaps, will be none the less appreciated, by the reflection that many of those who fall victims to its steady advances, are recruited from the ranks of our own confreres.

Opium addiction is a *disease*, a well-marked functional neurosis, and deserving recognition, as such, to a greater degree than it has hitherto received. In the vast majority of cases, the *vice* theory of its origin is incorrect, so that, with few exceptions, the term "opium habit," is a misnomer, implying as it wrongly does, an opiate using quite under individual control.

As elsewhere stated, "The Genesis of Opium Addiction," *Detroit Lancet*, Jan., 1884, two causative factors exist—necessity and desire, but the result, if the opiate be sufficiently long continued, is essentially the same—a condition of disease, as evidenced by various functional ills.

The central tracts involved are the cerebro-spinal and sympathetic systems. Deviations from health noted, are due to departure from the normal tone of one or both of these centres. Organic lesions are rare, possibly, some instances of renal or brain disease—the usual ultimate result being a state of marasmus, impaired nutrition and profound nerve depression, ending in death.

In the paper to which reference has been made, attention was invited to a new method of treatment, and as this is largely the same we now employ, some improved changes will be noted in passing. We re-assert that it is based on the power of certain remedial resources to control abnormal reflex sensibility, and accomplishes, largely, two cardinal objects, minimum duration of treatment and maximum freedom from pain.

It is a fact well attested by clinical observation that the ravages of opium excess are spent mainly on the nervous systems before noted, inducing changes that give rise to great nervous disturbance when the opiate is peremptorily withdrawn, unless some mitigating measures be interposed, and which, even in the process of very gradual withdrawal, is seldom, if ever, entirely avoided.

A recital of the varied symptoms of abrupt opiate renouncing is not here needed. Let it suffice to say we regard them all, certainly the most important—the aches, pains, yawnings, sneezings, shiverings, nausea, vomiting, diarrhoea, restlessness, delirium, convulsions, exhaustion, collapse—as reflex indications of great irritation in those centres, and any method having the power to counteract and control this condition must contribute vastly to the patient's comfort and cure.

Heretofore, two plans have obtained in the treatment of opium addiction. One, which may well be called heroic, the entire and abrupt withdrawal of the usual opiate, invariably gives rise to great distress of mind and body, to relieve which various remedies are, at the time, resorted to. Those not fully informed, and desirous of knowing the extent of this suffering, which is far from imaginary as some would have us believe, should consult Levinstein's work, in which are given details of twenty-four cases of hypodermic morphia addiction treated by this method, which the author, by a process of logic, neither safe nor sound, declares to be the best. *This statement we emphatically dispute.* No treatment that entails such suffering as in the cases cited, can claim pre-eminence over one more humane and equally effective. A study of the resultant effects in the instances alluded to reveals evidence of dire distress, in seven cases so extreme, perilous collapse, that a temporary return to hypodermic morphia became imperative to avert a fatal termination.

The other plan, consisting in a very gradual decrease of the usual opiate, meanwhile toning up the system to make amends for the accustomed narcotic, secures the desired result at much less discomfort, and we know of no reason why it should not be just as permanent. It is, however, open to the objection of requiring a much more protracted treatment, a point of importance when time is limited, while it also tends to exhaust the patient's patience, and many refuse to continue till success is secured.

The method we commend is a mean between these extremes, and consists in producing a certain degree of nervous sedation and consequent control of reflex irritation by means of the bromides, though we refer, specifically, to the *bromide of sodium*, having used that exclusively in cases under our care. This plan, which, so far as we are aware, is original with ourselves, is merely a new application of a well-established principle, for the power of the bromides to subdue abnormal reflex irritability is so constant that it may be looked upon as an almost invariable sequel of such medication. Dr. Ed. H. Clarke, in his valuable treatise on the bromides, says "diminished reflex sensibility, however different physiologists may explain the fact, is one of the most frequent phenomena of bromidal medication that has been clinically observed, and is, therapeutically, one of the most important." The testimony of other observers is to the same effect. Gubler, Cuttman, Laborde, Voison, Damourette, Sulenberg, Claude Bernard, Brown-Sequard, and Echoverria, all giving evidence as to the power of these agents over abnormal reflex action, and at the same time, over the general nervous system. Admitting that the symptoms of opiate disusing pertain almost exclusively to the domain over which the bromides exert so decided a control, we have a new field presented for the exercise of this valuable power, and the fact, proven conclusively by our experience, that it *does* exert this happy effect, fully supports the idea advanced as to the pathology of this disease.

In speaking of the bromide of sodium, let it be understood that we refer entirely to the influence of the *continued dose*, by which we mean its administration twice in the twenty-four hours, at regular intervals, so as to keep the blood constantly charged with the drug. A most important difference exists between the effect of this mode of exhibition and that of the single dose, or two or three doses so nearly together as to form practically one, for, in the former case, the system is constantly under the bromide influence, while in the other the drug being largely eliminated in a few hours, the blood is nearly free from it a large portion of the time. Results obtainable from the continued use cannot be gotten from the single dose, and, as a consequence, its value is far greater in the disease under consideration.

Again the action of the continued dose being somewhat remote, three to five days usually elapsing before there is decided evidence in this direction, much more desirable results are secured by its employment for several days *prior* to an entire opium abandonment, meanwhile gradually reducing the opiate, than if the withdrawal be abrupt and then reliance placed on the bromide; for, in one instance, the maximum sedative effect is secured at the time of maximum nervous disturbance from the opium removal, and its counteracting and controlling influence is far in excess of that to be had from its employment after the lighting up of the nervous irritation. What, then, we term *preliminary sedation* forms a peculiar and valuable feature in our giving of the bromide, and it is this special point we commend, our experience having convinced us that we have in it an unequaled means of obviating the discomfort incident to the treatment of this disorder.

The value of the various bromides depends on their proportion of bromine. Bromide of potassium contains 66 per cent, sodium 73, and lithium 92 per cent. We should, therefore, expect a more powerful influence from the latter agent, and, according to Weir Mitchell, it has a more rapid and intense effect. The sodium, however, answers every purpose, and has several points in its favor over the other bromides, is pleasanter to the taste, more acceptable to the stomach, causes little cutaneous irritation, and much less muscular prostration. In this connection, recent experiments and observations by Drs. Ringer and Murrell on the superior value of the sodium salt are of interest and may be found in the *British Medical Journal*, 1883.

Either of the bromides, in powder or concentrated solution, is somewhat irritant, sometimes producing emesis, and in any event, delaying its absorption. A practical point, then, is that it be given largely diluted. Dr. Clarke says, "there should be at least a drachm of water to each grain of the salt." We give each dose of the sodium in six or eight ounces of cold water, and have never known it to cause vomiting.

To secure the requisite degree of sedation within a limited period, it is essential that the bromide be given in full doses. We are convinced that failure in its use, in any neurosis, is very often due to a non-observance of this point. Our initial dose of the sodium is 60 grains, twice daily, at twelve hours intervals, increasing the amount 20 grains each day, *i.e.*, 70, 80, 90 grains, and continuing it 5 to 7 days, reaching a maximum dose of 100 to 120 grains twice in 24 hours. During this time of bromidal medication, the usual opiate is gradually reduced, so that from the eighth to the tenth day it is entirely abandoned. A decrease of one-quarter or one-third the usual daily quantity is made at the outset, experience having shown that habitues are almost always using an amount in excess of their actual need, and this reduction occasions little or no discomfort. Subsequently, the opiate withdrawal is more or less rapid according to the increasing sedation, the object being to meet and overcome the rising nervous disturbance by the growing effect of the sedative, in other words, maximum sedation at the time of maximum irritation.

Exceptions to this may occur. Some patients are so weak and anæmic, on coming, that a previous tonic course is deemed judicious, the usual opiate is continued for a time, and, meanwhile, with good food, tonics and other measures an effort is made to improve the impaired condition, and with success, for we have seen patients gain markedly in strength and weight during this roborant regime.

Sometimes, a patient, before placing himself under our care, has reduced his daily taking to the lowest amount consistent with his comfort. If so, the initial large reduction is not made, but the decrease is gradual throughout. Again, in some instances, no reduction is made for two or three days, at the end of which the bromide effect is secured, in part, and the decrease is then begun. And in all instances, this rule governs, *each case is a law unto itself and the length and amount of the bromide giving and consequent rate of opiate decrease is determined entirely by individual peculiarity as shown both before and during treatment.*

Surprise may be expressed and objection made regarding the extent of the bromide doses, but the fact must never be overlooked that we are not to be governed in the giving of any remedy by mere drops or grains, but by the *effect produced*. Again one effect of opium addiction is a peculiar non-susceptibility to the action of other nervines, necessitating their more robust giving to secure a decided result. More, under the influence of certain abnormal conditions, doses which ordinarily are toxic become simply therapeutic. The annals of medicine abound with instances in support of this statement, and among the most striking may be noted the following: Dr. Southey read before the Clinical Society of London notes of a case of tetanus which occurred in a boy ten years old. The first symptoms of trismus were observed two days after a severe fright and drenching due to the upsetting of a water butt. They steadily increased up to the date of his admission to St. Bartholomew's Hospital, on the eighth day of his illness, when the paroxysms of general opisthotonos seized him at intervals of nearly every three minutes. Each attack lasted from fifteen to thirty seconds, and although between the seizures the muscles of the trunk became less rigid, those of the neck and jaw were maintained in constant tonic cramp. The patient was treated at first with chloral, ten grains, and bromide of potassium twenty grains, every two hours, and, afterwards, with the bromide alone in sixty grain doses every hour and a half. When about two ounces were taken in twenty-four hours, the attacks became less frequent, but at first each

separate seizure was rather more severe, and on the evening of the eleventh day he was able to open his mouth better. On the thirteenth day the bromide was decreased to twenty grains every three hours, and on the fourteenth day was discontinued altogether. When the bromide had been omitted twenty-four hours the attacks returned at intervals of an hour, and the permanent rigidity of the muscles of the neck was re-established. His condition now steadily became worse, so that on the eighteenth day of his illness it became necessary to resort to the previous large doses, one drachm, every hour and a half. After three such doses, the expression became more natural, and he was able to open his mouth again; but it was not until the twenty-fifth day of the disease that it was possible to discontinue the remedy. The patient remained in a state of remarkable prostration and drowsiness, sleeping the twenty-four hours round, and only waking up to take his food for eight days, and passed all his evacuations under him. He subsequently steadily and rapidly convalesced. The bromide produced no ache or other disagreeable effect, and certainly seemed to exert a markedly controlling influence upon the tetanus.

Surely, under ordinary circumstances, no one would think of giving such doses of bromide, but here, under the antagonizing influence of the intense reflex irritation, their effect was vastly beneficial, conducing, beyond question, to the patient's cure.

Given as we commend, no effect is usually noted before the second or third day. Then patients mark an increasing drowsiness, which deepens into slumber, more or less profound, so much so at times that it is difficult to remain long awake. With this is a growing aversion to active exercise, not solely due to lessened muscle force, but largely to mental hebetude. Some cases are met with in which the hypnotic effect is not very decided, but the rule is as stated. Sometimes a saline taste and increased saliva with the bromic breath are noted, and the tongue becomes furred. Acne is usually absent. The renal secretion is, almost invariably, largely augmented. We have known patients to pass more than 100 ounces in the twenty-four hours, and we have noticed this, that where the renal activity is not increased, or is diminished, the sedative effect of the drug is more prompt and decided. The practical point of this is obvious, such cases require a less prolonged bromide giving.

With some there is slight transient loss of co-ordinating power in the fingers, and, exceptionally, in unusually sensitive subjects, there may occur mild startings of the fore-arm tendons. These, however, soon subside, and their going is largely hastened by local faradic seances.

Another bromide symptom, and a curious one it is, refers to a peculiar form of aphasia, as shown by using one word for another,—Brown for Jones, cake for comb, etc. This may persist for several days. Dr. Clarke refers to such instances, and says, "they are hints of a distinct organ of language, and suggest the notion that, inasmuch as the drug we are considering paralyses reflex, before it does generally, sensibility, language may be the expression or correlation of a peculiar reflex power."

Another similar symptom is an odd effect on the memory, the loss of a word or a sentence, and entire inability to regain them at the time, so that the train of thought is abruptly ended. These, though often amusing, are sometimes quite annoying to the patient, but possess no other importance and soon pass away.

Before dismissing this phase of the treatment we must again insist upon the fact that all cases of opium addiction do not require the bromide alike. This is a point of prime importance, and failure to put it in practice, is, doubtless, often the main secret of ill-success or unpleasant results in its use. The patient, as well as his disease, must be treated, and he who uses the bromide, as Fothergill asserts Opie mixed his colors, "with brains," will accomplish far more than the tyro who sets himself up in the treatment of this or any other disorder, and fails to be guided by good judgment. To follow a mere routine giving of the bromine, or any other remedy, unvaried by individual condition, is a sorry showing of professional incapacity. We have lately learned of a case of this kind, presenting a lamentable lack of discretion. The patient, a medical man, addicted to morphia, having decided upon self-treatment, began a plan of operations with the bromide, taking it himself for several days, and then its hypnotic effect asserting itself he gave orders that it should be given him some days longer, and this senseless advice being blindly followed by his attendant, he sank into a stupor which persisted for more than a fortnight. A more indiscreet and foolish performance is seldom heard of, and illustrates anew, in another sense, the truth of that trite legal proverb as to the mental status of the individual who is both lawyer and

client. Let it be distinctly understood that some cases of opium addiction are ineligible for the bromide treatment. Those complicated with serious lesion of the heart or lungs should be excluded, and those in which there is marked general debility should always be accorded a previous tonic course. Lastly, as before asserted, *in each and every case where it is given, the extent of its continuance is to be governed entirely by individual peculiarities as indicated both before and during treatment.*

We now desire to call attention to another point, which our experience has convinced us is of value. We refer to the treatment just after the habitual hypodermic or other opiate is abandoned. Supposing a case where at the end of five to seven days, as individual peculiarity may determine, the desired sedation is secured and the usual opiate reduced to a minimum, say 1-6 to 1-2 gr. each dose, instead of an entire discontinuance, we change the order of affairs and make a break in upon the routine taking, the "habit," so to speak, by giving one full dose, per orem, in the evening. This ensures a sound all-night sleep from which the patient awakes greatly refreshed, and often quite surprised at his good condition, which usually persists during the day. The next evening at about the same hour, the maximum bromide dose and two-thirds of the previous opiate are given. The third evening the same amount of bromide and one-third the first evening's opiate. This ends both opiate and bromide. Exceptionally, the full single dose of opium and sodium is given only one or two evenings. During the following day, if the patient be quiet, nothing is given. Should there be minor discomfort, one-half ounce doses of Fld. Ext. Coca, every second hour, have a good effect. Cases, occasionally, require nothing else. If, however, as usually occur, despite the coca, the characteristic restlessness sets in, we give full doses of Fld. Ext. Cannabis Indica, and repeat it every hour, second hour or less often, as may be required. When the disquiet is not marked, this will control. If more decided measures be called for, we use hot baths, Temp. 105 to 112, of 10 to 20 min. duration, and repeated as required. A short shower or douche of cold water often adds to their value. Nothing equals them for this purpose. Warm baths are worthless. The water must be *hot*, much so as one can bear. We have repeatedly known a patient to fall asleep while in the bath.

And, just here as to "full doses" of the hemp. The dose of the books is useless. As before stated, addiction to opium begets a peculiar tolerance of other nervines, and they must be more robustly given. We give 60 minims Squibbs Fld. Ext., repeated as mentioned, and have never noticed unpleasant results. Small doses are stimulant and exciting, large ones sedative and quieting, hence the latter are seldom followed by the peculiar haschish intoxication. And, lest some timid reader should regard this as reckless dosing, we hope to calm his fears by saying that the toxic power of hemp is feeble, and that these doses are the result of an experience of the drug in many cases, in which smaller ones have failed of the desired effect.

At this writing, two lady convalescents, still insomniac, are nightly taking these full doses with good effect in securing sleep. One recent lady patient, who did not lose a single night's slumber during treatment, and whose need for a soporific ended in eight days, took no other hypnotic whatever. We have used it of late more largely than ever, and with growing confidence in its sleep-giving power, taking, in this regard, almost exclusively, the place of chloral.

Regarding this insomnia, Levinstein and other German writers assert that it will "resist every treatment during the first three or four days." This may be true with them, considering their method, and is, of itself, added proof that they are lamentably lacking in the therapeutics of this disease. Under the plan we pursue, no such sleepless state is noted, and in ordinary, uncomplicated cases, patients can usually be promised recovery without the loss of a single entire night's slumber.

Chloral during the first four or five nights of opium abstinence, fails as a soporific, often causing a peculiar excitement or intoxication, patients talking, getting out of bed and wandering about the room, followed, it may be, after several hours, by partial sleep. Later, in full doses, we prefer 45 grs. at once, rather than three 15 gr. doses; alone or with a bromide, it can be relied on as a hypnotic, but we have thought that in some cases, where it secured sleep, patients, the next morning, felt a certain languor, of which it was, largely, the cause. Some who use the hemp, mention a feeling of fullness about the head and eyes, with occasional confusion of thought, but seldom complain of pain, having noted only one such case.

The bromide, baths, hemp, and coca, with or without capsicum, of which more later, are, therefore, main remedies for the restlessness and insomnia, two symptoms which, with a third, sneezing, are invariable sequelae of opium withdrawal, and, wanting which, patient is surely deceiving his physician.

For relief of neuralgic pains in various parts, which sometimes occur, varied measures suffice. At the head of the list are electricity and the local application of ether. As to the value of the galvanic current in neuralgic headache, so common in opium habitues, and the manner of using it, the reader is referred to a paper on "the prevention of opium addiction," in the *Louisville Medical News*, Feb. 23, 1884. The same agent is effective in relieving limb and lumbar pains, though here a much stronger current is required than can be used with safety about the head. Sometimes a strong faradic acts well, and where one fails, trial should always be made of the other. Local hot baths, sitz or pediluvium, are often of great service for this purpose. Chloroform, locally, relieves; so too, massage.

Regarding the ether, those who have never employed it, will, we are sure, be surprised at its pain-easing power. It matters not how it be applied, spray, drop or lavement, it is potent for good.

These three, electricity, ether, hot water, are our main anodynes, and one special point in their favor is entire freedom from unpleasant gastric or other results.

For relief of minor neuralgic pains other remedies, at times, suffice. Croton chloral, in 5 gr. doses, every hour, is sometimes quite effective in tri-facial disorder. Tonga, in one drachm of fluid extract every hour, is often a reliable anodyne. Its value in some cases seems increased by combining it with the various salicylates. Caffein or guarana occasionally relieve.

Externally, menthol, in solution, two drachms to the ounce of alcohol used with a brush, as a spray, or the menthol cone, is sometimes of service, so, too, the well known camphor and chloral combination, bi-sulphide of carbon and various minor local anæsthetics.

Under this plan of treatment, disorder of stomach or bowels is rare. Our rule is to give an active mercurial or other cathartic, in the outset, if there be evidence of alvine disorder, and then secure regular action by such laxative as is found most agreeable. If the latter be so relaxed as to require restraint, xxx minim doses of fld. ext. colo, or 60 gr. doses of sub. nit. bismuth, every two to four hours often serve a good purpose. They are best given in capsule. If, however, the diarrhœa persists more than 24 hours, the most effective measure is to give a full opiate, tinct. opii., per mouth or rectum, preferred at bedtime. This promptly controls, gives a full night's sleep, and the trouble seldom returns. Fear of an untoward effect on convalescence is unfounded. With our experience, the assertion of one writer that "it is impossible to cure the opium habit," and bridge the patient over the crisis, without having the bowels freely relaxed, seems quite absurd. We have again and again seen patients recover who had only 2, 3, or 4 movements daily. One such, lately dismissed, was a hypodermic taker of 20 grs. morphia, daily, and had been addicted for several years. Others have required a laxative enema in less than a week after the opiate withdrawal.

Formerly, an exclusive milk and lime water diet during the first two or three days of opium abstinence was deemed advisable. This regime is not now imposed, as some patients are able to do dietectic duty, and the rule is to make no restrictions unless the exceptionally occurring stomach or bowel trouble seems to require. More than one patient, habitues for years, did not vomit once. The excessive vomiting mentioned by Levinstein and Obersteiner, they practice abrupt disuse, we have never noted. The former thinks the collapse, which we have never seen observed, in several of his cases, was due to the vomiting and purging. Probably the largest factor in causing it was the exhausting general mental and physical suffering which his monstrous method entails.

If the stomach rebels, entire rest, abstinence from solid food, or all food, for a time, milk and lime water or Murdoch's food, in small amount, often does well. If more active measures be required, sinapisms, ether, Faradism externally and internally, bismuth, chloroform, Menth. pip., ice, are of value. If all fail, a full opiate, hypodermic, will promptly suffice.

Having thus crossed the opiate rubicon, treatment relates, largely, to the debility and insomnia. For the former, of internal tonic-stimulants, coca leads the list. But our experience does not warrant Morse's assertion "coca cures the opium

habit"—that is a mistake. While it is of great value in relieving the varied symptoms of lessened nerve tone, it is *not a specific*. Patients, long used to opium cannot abandon it and trust to coca alone, to carry them over the crisis. This, save in mild cases, it will not do, but, conjoined with other measures, it is strong for good. Of a reliable fluid extract, we give it sometimes before, and always after the acute restlessness, in 4 to 8 drachm doses, every two hours, or less often as required, and continue in these full doses, at increasing intervals for several days. As need for it lessens we decrease the dose to one or two drachms, and this amount, ter die, combined with other tonics may sometimes be continued with advantage for weeks. As a rule, however, its use is quite abandoned within a fortnight. Its effect, while noted in from three to twenty minutes, seldom persists more than two or three hours, so that, when the demand for it is active, it is best given at this interval. To remove the mental and physical depression, the minor neuralgiæ, and the occasionally occurring desire for stimulants observed in these cases, nothing equals it, being in this regard more nearly a specific than any drug at command: and capsicum, in doses of one-half to one drachm of the tincture, with the coca often adds to its value. For details of this drug and its uses, see "a Case of Coca Addiction," reprint of which can be had of the writer.

Another agent of much service is general faradization, 20 min. seances daily, the feet on a plate to which the negative pole is attached, while the other electrode, encased in a large sponge well wet with warm water, is applied to the entire surface, with a current strong enough to be thoroughly felt, but not painful. This imparts a grateful sense of exhilarating comfort, and is the most effective tonic at command. Thus applied or with anode to cervical spine it may be used daily so long as indicated, taking care not to overdo, for a current too strong or prolonged works mischief, overstimulating and exhausting to the extent, it may be, of several days discomfort, which nothing but time will remove. Very exceptionally, faradism disagrees and has to be abandoned.

Alternating with or following we may use the galvanic current. This is a general tonic of special value in these cases. Our method is, positive pole to nape of neck, and negative to epigastrium for five minutes; then the former behind the angle of each jaw for one or two minutes, making the entire seance of 7 to 9 minutes.

Next to the electric tonic ranks the cold shower bath. It certainly is a great invigorator, and many a patient who dreads it at first, soon comes to appreciate it most highly. If agreeing it should always be taken. With some it acts as a hypnotic. We recall one instance, in particular, of a medical gentleman, who, still somewhat insomniac, after sleeping two or three hours and awaking with no prospect of further sleep, would take a shower, followed by vigorous rubbing, and soon fall into a refreshing slumber lasting until morning.

Internal tonics of course have a place in the roborant regime, varied as the case may demand. In some cases we employ them from the outset and the use of tinct. ferr. murr. in large doses, 15 to 20 min. thrice daily, has seemed in virtue of its tonic astringent effect, to serve a doubly good purpose, in lessening the tendency to alvine relaxation. After the opiate disuse, an excellent combination fld. ext. coca with syr. hypophosphites iron, strychnine and quinine, two drachms of each after meals. Another, Fowler's solution or tinct. nux vomica with dilute phosphoric acid or acid phosphate. If anemic, ferric tincture or Blanchard's pills. Digitalis is often useful in many cases, cod-oil is of value, and may be continued for months. We make choice, as required, of emulsion with pepsin and quinine, emulsion with phosphates or plain oil.

Some degree of anorexia is always present, yet it may not prevent the regular meal, and need never occasion anxiety, for probably it will soon give place to a well-marked reverse condition, which may be encouraged to fullest feeding short of digestive disaster. The appetite often becomes enormous, and sometimes, restraint and digestive aid are demanded. If it be slow in returning, rousing measures will suggest themselves. In such cases it has seemed a good plan to stir up the alvine system, once or twice a week for a time, with a mild cathartic at bedtime, or a full morning dose of hunyadi.

One result of the opiate quitting and the regime noted is often a greatly improved nutrition, as shown by a notable increase in weight. One physician, not long since dismissed, gained a pound a day, and another convalescent has lately been adding to his avoirdupois at the rate of twelve pounds a fortnight.

Regarding the insomnia, Levinstein says, "sleeplessness, which is generally protracted up into the fourth week, is very distressing." For reason before given, his assertion is not surprising. Our record differs. Wakefulness is an invariable sequel and requires soporifics for a time, but is not so prolonged and does not resist treatment. We have known a patient able to dispense with hypnotics in five days: others in eight, and nearly all within a fortnight. Sometimes, they are longer required. Two patients, both physicians, during the last year, did not regain natural sleep for three or four weeks, but this is quite exceptional.

This insomnia is of two kinds. Most patients, after the acute has been passed, soon secure sleep on retiring, but waken early, two or three o'clock, and fail to get more. Others remain awake nearly all night before slumber comes, and these are the ones who usually require soporifics the longer.

For relief of this, cannabis indica or chloral with bromide, in full doses, serve our purpose. If, as rarely happens, the wakeful state is so pronounced or prolonged, despite treatment, as to distress the patient, we never hesitate to give a full opiate sub rosa, and always with good result. In all cases drugs should be dropped soon as possible, and sleep secured by a fatiguing walk, or other exercise, an electric seance, a Turkish, or half hour's warm bath with cold douche or shower, a light meal or glass or two of hot milk, one or more of these before retiring.

Patients whose slumbers end early often note a peculiar depression on waking, and when such is the case, a lunch, milk, coffee, coca, or Murdoch's liquid food should be at their command.

It may be well, in passing, to refer to certain minor sequelae and their treatment. Occasionally a patient complains of dyspnea, or palpitation. We have never noted them but twice, both ladies. A stimulant, coca with capsicum, or Hoffman's anodyne with aromat. spts. ammonia will promptly control.

Some patients are at times annoyed by aching pains in the gastrocnemii, that may recur during several days. Fld. ext. gelsemium, in full doses, strong galvanic or faradic currents, massage, local hot baths, and topical use of chloroform or ether will relieve.

Others mention a peculiar burning in the soles of the feet which mustardizea pediluvia and full doses of quinine usually control.

Sometimes, a dry hacking, paroxysmal cough, more marked at night, may discomfort a patient for a time. It can be relieved by nitrate of silver spray 10 to 20 grs. to the ounce; a bromide of sodium gargle, 60 grs. to the ounce, or a small blister to the sternum.

Returning sexual activity, as shown by nocturnal emissions and erections, as a rule, requires no attention. We once noted, however, a case where the awakened virile vigor was so marked that repressive measures were demanded.

The periodical function of females, which, usually, is irregular or suspended, has, so far as we have observed, required no special after-treatment.

Along with what has been suggested, should be such other general hygienic measures as will add to the good secured. Patients *must* be given attractive surroundings, cheerful society, diverting occupation and amusement, and freedom from care or worry of body and mind, in fact anything, everything, that will aid in the effort to secure a return to pristine health and vigor. That the management of these cases *subsequent* to the need of *active* professional care, is of great importance, enlarged experience increasingly convinces. Neurotic or other disorders noted prior to addiction, whether genetic or not, must be relieved or removed. So, too, with those that may first appear after the opiate disusing: and when none of these are met, when there is merely a lessened power of brain and brawn, ample time, months or years, if need be, must be taken in which to get thoroughly well, if the chance of a relapse would be brought to a minimum.

It is not to be supposed that a system shattered by opiate excess will regain its normal status within a week or a month, nor that a premature return to mental or physical labor will not imperil the prospect of permanent cure. The importance of this must be insisted upon. To medical men, who compose so largely the better class of habitues, it is especially commended. Professional work must not be resumed too soon. The frequency of a narcotic return is in reverse relation to the length of the opiate abstention, and, as favoring this abstinence, prolonged rest, change of scene, foreign travel, sea voyages, all have much promise of good.

The absence of reference to certain remedies which have been mentioned by some as especially useful in the treatment of this neurosis may be briefly noted. Belladonna has been supposed to have a special value. We once used it to the extent of dry mouth and disturbed vision during the opiate withdrawal, but have quite abandoned it, for the simple reason that we found, on trial, patients did fully as well without it, and the freedom from its peculiar effect certainly added to their comfort. Whatever its antagonistic influence in acute opium taking we do not believe it possesses any such virtue in the chronic form.

Quinine in large doses, from the outset, or grs. II. to IV., increasing with the opiate reduction, has been thought to have special value. We have failed to note it, though as a tonic it is well adapted to all cases, and in some patients, 20 gr. doses as an anodyne or soporific act well.

Strychnine is another valued tonic, especially in a very gradual opiate decrease, or at weekly or fortnightly reductions. It has no other claim.

Hydrocyanic acid dilute, aconite and veratrum viride have been suggested. Why, we fail to understand.

Jamaica dogwood has been commended as an opiate substitute, and Morse lauds it extravagantly. He, however, is an enthusiast, and, as such, goes quite too far.

Regarding its use, he says; "coca cures the opium habit, Jamaica dogwood does more than this, it is prophylactic of this disorder. By its use the baneful habit is forbidden the system. This, we think, is nonsense, and have no hesitation in declaring our belief that it is a most mistaken opinion.

And, again, "As an hypnotic opium is not of greater worth," and, "as an anodyne, opium is its only peer." Our experience is entirely contrary to any such assertions. We have made frequent trial of it, the results were uneven. In a few cases the minority, as an anodyne, it seemed efficient. As a hypnotic, it always failed. Morse puts the dose at "fld. ext.: dose min. v. xv." Our ill result, certainly, was not due to the limited quantity, for we usually gave it in *two drachm* doses. More recent trials have proved utter failures. One as an anodyne in neuralgia, four one drachm doses, half hour interval, no relief whatever. Another, as a soporific: six one drachm doses, same interval, no sleep. It is a nauseous drug, and the aversion to continuing it may sometimes account for its failure. Our patients, too, may be peculiar, but, be that as it may, we have little faith in its value, and now seldom employ it.

Avena sativa has been largely lauded. We have given it again and again, in doses large and small, in water hot and cold, at intervals short and long, and always found it *worthless, absolutely good for nothing*. Bottle after bottle has been left with us by those who made trial of it in vain, and their experience accords with many who have written us, some of whom have taken the "drug" *in ounce* doses several times daily, and used *pounds* of it in the trial, without good!!! Let no one be beguiled into the belief that oats fills the "long felt want." Correspondence has furnished material for a paper which will, we think, quite disprove its vaunted virtue.

Hyoscyamia is a powerful drug, and in some cases may be of service. We once used it, but the need for it now seldom arises. Its employment should be limited to patients in good general condition, in whom the opiate disusing is attended with unusual insomnia and motor activity. In such instances its good effect is sometimes surprising, bringing quiet and sleep with a promptness and power almost startling. We use Merck's amorphous dose 1-12 to 1-16 of a grain hypodermically. This in these patients may be deemed the usual dose. With some, however, this causes a mild delirium without sleep, and in such cases the dose must be increased. Regarding its safety, Dr. John C. Shaw, superintendent of the King's Co. Insane Asylum, has assured us that it is largely given in that institution with as little fear of ill effects as would attend the use of morphia.

The new alkaloid of Indian hemp, tannate of cannabin, commended by German authority, proved an entire failure in our hands. In ordinary insomnia, however, it may act well.

The latest claimant for professional favor as a soporific is paraldehyde. Dujardin Beaumetz lauds it, and claims special value in these cases. Our experience does not warrant such statement. In full doses, 4 to 8 grammes, 60 to 120 minims. It sometimes brings sleep; unlike chloral, in the early nights of the opium abstinence, it does not excite. In most cases both are inferior to Indian hemp. It is best given in one half to one ounce of syrup flavored with peppermint, ginger or vanilla, and then added to a wineglassful or two of ice water.

Non-mention of alcoholic stimulants has perhaps been noted. We rarely use them, the reason is varied. They are seldom called for. Very exceptionally, champagne, milk punch or ale may be indicated, but our rule is, *never to use any form unless imperatively demanded:* and the advice of Levinstein that "those who have an intense craving for alcoholic beverages may be allowed to drink wine in unlimited quantities," is, we think, *positively pernicious.* As Bartholow says, "When the nervous system is losing the loved morphia impression it will take kindly to alcohol;" and he adds: "I especially warn the practitioner against a procedure which the patient will be inclined to adopt, that is to take sufficient alcohol to cause a distinct impression on the nervous system in place of the morphia. This must result disastrously, for when the alcohol influence expires there will occur such a condition of depression that more alcohol will be necessary."

With these opinions we are quite in accord. The fact must not be forgotten that some habitues have used alcohol with morphia: others have taken morphia after addiction to the former, and, in general, habituation to any stimulant or narcotic, begets a liability to take to another in case the original one is abandoned. As a factor in release, alcohol-taking ranks next to a re-use of opium. The risk, then, is obvious,' and let the physician beware lest, in the effort to aid his patient in escaping one peril, he but involves him in another yet greater.

Some details of treatment, apart from the strictly remedial, may be of interest. Our rule in making the opiate decrease is not to inform the patient as to its progress, nor the actual time when it is ended. Better tell him when days have elapsed since the last dose, and then the assurance that so long a time has gone by since his enemy was routed will, of itself, be an aid in finishing the good work. The incredulous surprise with which this knowledge is received by some patients who have made frequent but futile efforts to escape, is quite notable.

As regards the manner of taking, a radical change is made. If hypodermically, the syringe is at once discarded and a sufficient amount of morphia or opium per orem given. In many cases resort to the morphia or opium can be made at once. If so, it should be done. If not, their use giving rise to nausea, vomiting or headache, as exceptionally they may, the usual method can be resumed for two or three days, and then the bromide influence having been secured in part, the syringe may be put aside, and the opiate used without unpleasant effect.

A German writer some time ago asserted that many patients taking more than four grains, 25 to 30 grammes, hypodermically daily, will get along fairly well with the same amount of morphia by the mouth. We have not found this to be the case. On the other hand, three times the subcutaneous supply as advised by Bartholow is more than enough. An increase of one-half or double the amount will usually suffice.

Patients may demur to the change, but it should be insisted on, for experience has proven many points in its favor. In the first place, we believe there is, with some, a certain fascination about the syringe, which, once ended, makes an advance towards success in treatment. Many patients come to think that the injections are absolutely essential, and to convince them to the contrary, as the change in taking will, inspires a feeling of gladsome relief and larger confidence in a happy result.

Again the *staying* power, so to speak, of morphia or opium per orem, is much greater than by subcutaneous taking. Of this there is no question. Morphia, hypodermically, is more quickly followed by the peculiar effect of the drug, which, too, is more decided, but earlier subsides, a higher acme sooner reached, to decline more rapidly; whereas by the mouth, or in the form of opium, the rousing effect is more slowly developed, but it is on an evener plane, and more persistent. Patients accustomed to four, to eight injections daily, will do well on two or three doses per orem. One medical gentleman, now under treatment, who had been taking six injections daily, is doing perfectly well on one dose of opium by the mouth, night and morning.

As a rule, too, the change in taking brings about a marked improvement in the patients' condition. We have known them, after using the new method a few days, to declare that they felt better than for years. In many ways, notably increased appetite and improved alvine action, is the change for good.

Still more, those who quit the syringe, and take morphia or opium, usually cross the rubicon of their opiate disusing with withdrawal symptoms so largely lessened as to make this result alone ample reason for the course we commend.

During the decrease, patients are permitted, if desired, to continue their frequency of taking. As a rule, however, by reason of the greater sustaining power of morphia or opium by the mouth, it is not required.

The only restriction imposed is that a certain amount shall suffice for twenty-four hours supply, and this is daily decreased, according to individual need, at such rate as will least likely conflict with their comfort. Patients, moreover, are always instructed that if the amount allowed does not suffice they are to apply for and will be given more. Such being the case, no proper motive exists for secret taking, and if, despite this liberal proviso, it is indulged in, professional relations are suspended.

This being our plan, it will be inferred, and rightly, that we do not subject patients to such surveillance as compels their taking a bath, during which search is made for contraband morphia. Nor do we have an attendant "dogging" their steps during the decreasing regime. No patient with proper self-respect would submit to such treatment without resenting it: and it is not likely to strengthen the confidence that should always exist between patient and physician, and which, with us, is asked for and given. Very seldom is it violated. Patients come to us for relief: they are willing to aid in the effort to secure it, those who are not we decline to accept, and the result is, success.

It is sometimes asserted that all opium habitues are liars, and that, on presenting themselves for treatment, they are always equipped with a syringe and supply. Such a sweeping assertion we do not believe, *we know* it is *not true*. Why, then, should we humiliate them after such a fashion, degrade them by imposing such detective surroundings? Others may, we will not, and as yet we have no reason to doubt the wisdom of our course.

Clandestine taking, either before or after withdrawal, can always be detected. The absence of certain invariable sequelæ of an honest quitting is positive proof of deception; while the presence of morphia in the urine after the time when it should disappear, along with other symptoms, furnish added evidence beyond dispute.

It will again be inferred, and also aright, that we do not practice any such plan as Levinstein advises, when he says: "As soon as the patient has consented to give up his personal liberty and the treatment is about to commence, he is to be shown into the room set apart for him for the period of eight to fourteen days, all opportunities for attempting suicide having been removed from them. Doors and windows must not move on hinges, but on pivots, must have neither handles nor bolts nor keys, being so constructed that the patients can neither open nor shut them. Hooks for looking-glasses, for clothes and curtains, must be removed. The bed-room, for the sake of control, is to have only the most necessary furniture; a bed, devoid of protruding bed-posts, a couch, an open wash-stand, a table furnished with alcoholic stimulants, champagne, port wine, brandy, ice in small pieces, and a tea urn with the necessary implements. In the room, which is to serve as a residence for the medical attendant for the first three days, the following drugs are to be kept under lock and key, a solution of morphia of 2 per cent., chloroform, ether, ammonia, liq. ammon. annis, mustard, an ice bag, and an electric induction apparatus. A bath room may adjoin these two apartments. During the first four or five days of the abstinence, the patient must be constantly watched by two female nurses."

Now what means this rigorous regime? First, that the lack of efficient medical measures essentiates physical force. Second, that the method employed entails such distress of mind and body as to risk a suicidal ending; and that a great calamity always impends—collapse that threatens life, and demands that the Doctor be closely at hand to avert the dreaded danger!

In strong contrast with what has been quoted, during our opiate withdrawal patients are not only permitted but encouraged to go out and about, attend entertainments, and engage in social domestic pleasures; and this is continued throughout treatment, save a transient suspension following the first twenty-four hours of opium abstinence. After the first day of opiate disusing, patients are, for a time, under careful attention, and, if required, an attendant is with them, but the need for services of this sort is, usually, quite limited, and in some instances entirely dispensed with. Again and again have patients presented, who fully expected the rigorous regime imposed by Levinstein, but who were happily surprised to find it was not demanded, and who were fully convinced, before their treatment ended, that it was not at all essential.

As between this method and the barbarous plan of those who counsel and compel heroic withdrawal "comparisons are odious."

In this day of advanced therapeutics the writer holds radical opinions as to the *utter inexcusability*, the *positive malpractice* of subjecting patients of this class to that torture of mind and body the German method entails. It is wrong, grievously wrong; more, it is *cruel* to demand that they shall run the gauntlet of such suffering.

In various papers we have expressed our view on this important part of the subject, and enlarged experience tends only to confirm them. More and more pronounced is our belief "that no physician is warranted, save under circumstances, peculiar and beyond control, in subjecting his patient to the torturing ordeal of abrupt withdrawal. We are well aware that it has the sanction of men otherwise eminent in the profession, but we venture to suggest, with no lack of respect to these gentlemen, that, like a somewhat famous nautical individual, "they mean well, but they don't know." Theory is one thing, practice another, and we are quite certain, were they compelled to undergo the trial, there would be a rapid and radical change of opinion. We regard it as cruel, barbarous, "*utterly unworthy the healing art.*"

"We care not who advocates it, but speak feelingly, emphatically and advisedly on this point, for the simple reason that our experience, again and again repeated, proves beyond all dispute that the opium habitue can be brought out of his bondage without any such crucial suffering as this method of treatment entails."

Bartholow says:—"Having had one experience of this kind, I shall not be again induced to repeat it, if for no other, for strictly humanitarian reasons, since the mental and physical sufferings are truly horrible."

For proof of this and more in detail, the reader is referred to papers by the writer: "Clinical Notes on Opium Addiction," Cincinnati *Lancet and Clinic*, March 3, 1883; "Neurotic Pyrexia with special reference to opium addiction," New England *Medical Monthly*, June, 1883; "The Treatment of Opium Addiction," *St. Louis Courier* of Medicine. June, 1883; and "A personal narrative of Opium addiction," New York *Med. Gazette*, July 7, 1883, reprints of which can be had, if desired.

More, many unaware that a more humane method is at command, and dreading the ordeal of abrupt disusing, refuse to accept it, and, continuing their narcotic, bind all the more closely "the web that holds them fast as fate." During the past year a medical gentleman nine years addicted to morphia came under our care. Six years ago he first consulted us. During this time he had read Levinstein's book, and the dread of such suffering as that author's patients underwent was, he avowed, the reason for his delay in making an effort to quit the morphia. Finally, summoning sufficient courage, though not without much apprehension, the trial was made, and with the most gratifying success, for, greatly to his surprise and pleasure, he made a notably good recovery, with so little nervous disturbance that not a single bath was called for, and with such freedom from pain that not once was an anodyne demanded, and was dismissed on the 26th day of his treatment. Commenting on his case he declared the manner of his recovery seemed "almost miraculous," and asserted that, had he ever thought so much could be accomplished at so little cost of time and discomfort his effort, years earlier, would have been made, and in a recent letter he wrote: "My own swift and easy passage of that 'one more river to cross,' is an ever recurring-source of wonder and astonishment to me, and not a day passes, not a morning comes, without a keen sense of exultation at my escape from the old slavery, a blessed freedom from the old self-accusing conscience, and a return of the old instinctive habit of looking every man straight in the eyes! I think I shall never entirely get rid of a certain shadow of the past; nearly nine years of mental distress, which I thought well-nigh hopeless, most leave a deep and ugly scar at my time of life, but, thank God, that I have only the scar to trouble my memory and not the festering, corroding ever-present ulcer which made me unspeakably wretched and kept me in continual fear of discovery."

Reference to this is made simply to support our statement and convince, it may be, some hoping, yet dreading that scientific treatment has much to promise for their relief.

Before closing, let it be noted that this, beyond question, is a vincible disease, and re-assert, vide "opium addiction among medical men, that repeated experience warrants the assertion that every case of opium addiction free from organic disease, and in which there is an earnest desire to recover, be the extent and duration what it may, admits of prompt and positive relief."

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, October 24th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Missed Abortion.—Dr. ALLOWAY read a paper on this subject.

Dr. KENNEDY said he did not like this new name, "Missed Abortion," especially if applied to the retention of a dead fœtus over five months old. He said it was well recognized that the fœtus might die, become mummified, and be retained, or, after its death, it might be expelled and the membranes alone be retained.

Dr. CAMERON also took exception to the term "missed abortion," as not being precise. He mentioned that McClintock made fun of the term by saying that when a woman went to full time it was a case of missed abortion. He prefers calling a blighted ovum a *mole*.

Dr. TRENHOLME said there was no question as to a dead fœtus being retained in some cases for several weeks or months. The only point was as to whether the specimen exhibited was so retained or not. The indications led him to question its long retention, and to regard it as one of a series of early abortions. In those cases of retained fœtuses which had come under his observation, he had found an abnormal condition of the decidua —the reflex decidua being distinct and separate from the uterine decidua, which is strongly adherent throughout. In this way the enveloped fœtus became a sort of tumor, frequently causing hæmorrhage, and its growth being interfered with, the subsequent death of the fœtus is due to the compressing force of the reflex decidua. In his cases he found the decidua very strong indeed, a good deal of force being required to rupture it and allow of the removal of the fœtus. Dr. T.'s theory is that there is sufficient vital union existing to prolong the retention, while the pressure is such as destroys life. It is only when the contents of the uterine cavity become separated to such an extent that the contained mass acts as a foreign body that uterine contractions ensue. This is true whether the contents to be expelled is an early or late product of conception. The fact of the non-union of the reflex and true deciduæ accounts for menstruation during pregnancy; also for the well known fact that frequently no harm follows the use of the sound, nor even the application of remedial agents to the cavity. Of course the separation of any part of the placenta would be apt to be followed by uterine contractions.

Dr. CAMPBELL said he had a patient with symptoms indicating treatment by means of applications to the interior of the uterus. He first passed a sound and afterwards painted with a solution of iodine and also acid. nitrate of mercury. This was done four or five times before the real cause of her trouble was found out by her aborting.

Dr. ALLOWAY said, in reply to those gentlemen who took exception to the term "missed abortion," that if a better one could be suggested he would gladly accept it. Dr. McClintock's little joke was simply an *Irishism*, and was not intended to convey any literal meaning. Dr. A., however, drew attention to the error of confusing the terms Missed Abortion and Fleshmole. He referred to his definition of the terms relatively, as given in the body of the paper, which distinctly shewed that the term missed abortion alluded to "*a condition*," and that a mole was "*the product*" of this condition—in fact, a pathological specimen; and that the terms could not be used with any other meaning or relationship. In conclusion, Dr. Alloway said he felt much gratified with the kindness shown by the members who had discussed his paper, more especially for their complete recognition of the correctness of his views relating to this interesting subject.

PATHOLOGICAL SPECIMENS.

Dr. SUTHERLAND exhibited the following specimens :—

1. *An Appendix Vermiformis, containing 14 snipe shot.*—This was removed from a patient who died of chronic Bright's disease, and who had been a lover of game.

2. *Intestines from a case of typhoid fever*, where the patient died on the ninth day of illness, and before ulceration had taken place. The Peyers' patches were swollen and raised about a quarter of an inch. This patient was admitted into the hospital on the sixth day in an unconscious condition, and remained so until death, three days later.

3. *A heart, showing calcification of the valves of a congenitally narrowed aortic orifice.*—Dr. Ross said this had been removed from a gentleman, a traveller, stopping at one of the hotels. He had suddenly taken ill with alarming symptoms, and was sent to the hospital. When admitted he was suffering from dyspnœa, and died shortly afterwards.

4. *Abscess of the Liver.*—Patient, a woman, was admitted into the hospital under the care of Dr. Molson, with the following symptoms: Pain and tenderness in both iliac fossæ; worse in the right. Had a quick pulse, and was suffering from dysentery. She died in 48 hours. There was a history of having had an attack of illness, with similar symptoms, about a year ago, and lasting five weeks. The *post-mortem* showed signs of an old peritonitis in the region of the right iliac fossa; also signs of recent peritonitis in right hypochondriac region. Flakes of lymph were adherent to the under surface of the liver. On removing this organ pus was seen oozing from a small opening on its under surface, where rupture had taken place. Fifty or sixty ounces of pus were removed from the cavity in the liver.

5. *Horse-shoe Kidney*, also from a hospital patient, aged 32 years. The right half was healthy: left half was filled with pus. A large calculus in the pelvis blocked the exit of urine; several small calculi were seen in the calyces. The microscopic appearance of the right kidney was normal. Both lungs were riddled with cavities. This patient had been admitted with phthisis. On admission the urine contained 50 per cent. of albumen. There was excessive pain in the left lumbar region with frequent micturition. At first he passed large quantities of water, it became less, and, during the last 36 hours, scarcely any came away.

6. *Pyo-pneumo-Thorax, showing ulceration from a large lung cavity into the pleura.*—This specimen was removed from a man aged 27, admitted into hospital August 1st, 1884. He was a stonecutter, of steady habits, a moderate drinker, and belonged to a phthisical family. He had typhoid fever eight years ago; had coughed and expectorated ever since. He had failed rapidly during the last seven months, and had suffered with severe cough, fever and sweating. Four days before admission he took a sudden sharp pain at the left apex, and, shooting downwards, was accompanied with great dyspnœa. There were now present signs of softening tubercular deposit in the right lung; the left was loudly tympanitic, with feeble amphoric respiration. The heart was pushed to the right. Whilst in hospital there was extreme dyspnœa (orthopnœa), with irregular hectic fever and profuse sweating. On Aug. 5th, distinct succession sounds were heard; breathing amphoric, loud and distinct to the base. Dullness up to the tenth rib on leaning back; loud, clear resonance down to twelfth rib leaning forwards. This condition persisted till death took place from exhaustion on the 17th September.

Special General Meeting, Oct. 31, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

This meeting was called to consider Dr. Tuke's report on the Insane Asylums of the Province of Quebec, and generally to discuss the treatment of the insane in this province.

Dr. CAMPBELL, who opened the discussion, strongly denounced the present farming or contract system, and deplored the lack of skilled medical treatment in our asylums.

Several resolutions were read and spoken to, Drs. Trenholme, Shepherd, Kennedy, Geo. Ross, Reed, G. T. Ross, Cameron, McConnell, Mills and the President taking part.

The following are some of the chief objections mentioned by the speakers to the present system of managing the insane poor of this province: That it led to cheap everything—attendants, care, fare, etc.—and to an entire absence of skilled medical treatment, which latter want resulted in a minimum of cures and the excessive use of mechanical restraint.

Dr. CAMERON read portions from the Lunacy Act for the Province of Quebec, passed last June, and which he characterized as being very loose, incomplete, and apparently drawn by an amateur. No blame was attached to the ladies of the Long Point Asylum or to Dr. Henry Howard, the onus being placed on the Government.

Dr. HENRY HOWARD, who was not present, sent a written communication, criticising Dr. Tuke's report and expressing his disapproval of the contract system.

A committee was formed to draw up resolutions embodying the sentiments expressed at this meeting, which resolutions were to be forwarded to the Government.

Stated Meeting, Nov. 7th, 1884.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Dr. ALLOWAY exhibited the following Pathological specimens :

1. *A Fœtus of two months,* complete in its sac.

2. *A Fœtus three months old,* showing arrest of development of the abdominal walls, and through which opening the bowels protruded.

3. *A Fibroid growth the size of an almond,* removed by him from the anterior wall of the vagina, just inside the introitus. The woman had suffered from hæmorrhages, and her health was broken down, largely, no doubt, from septic poisoning, as the little growth was sloughing. Since its removal the hæmorrhages have ceased, and the patient's health has very much improved.

Dr. TRENHOLME exhibited a *Pair of Ovaries* removed by him the day before from a woman aged 28 years, who has suffered from pelvic distress since she was 14 years old. Six years ago she had a child, after a difficult labor, from which time her sufferings have been worse, quite incapacitating her for her duties. On examining her he found in Douglass' fossa a tumor which he took to be a diseased and enlarged right ovary, and decided to operate. On opening the abdomen the left ovary was also found to be enlarged to about the size of an egg and filled with fluid. It was first removed, along with its tube. Much greater difficulty was experienced in removing the right, as it was firmly fastened down in Douglass' pouch. It was about the size of a large walnut, and filled with pus. Dr. Trenholme said the patient was doing well ; pulse 82, temperature normal.

Perforation of a Typhoid Ulcer in the Colon; Peritonitis.—Dr. Ross exhibited the specimen and related the case. The ulcer was situated about a foot from the ilio-cæcal valve. The patient was sent to hospital on the 21st day, with a good pulse, temperature 99° to 100°, the only bad symptom being tympanitis. Dr. R. remarked that it was very unusual to find a perforating ulcer in the situation of this one. They are found much more commonly in the ileum. Tympanitis had been a prominent symptom, and resisted all treatment. It did not arise from constipation and retained decomposing fæces, as is sometimes the case, as care had been taken to prevent this, and the autopsy showed the bowels to be nearly empty. It made the prognosis bad. The onset of perforation and subsequent peritonitis were well marked.

Dr TEMPLEMAN asked why not perforate through the abdominal wall to let out gas.

Dr. ROSS said there were no distressing symptoms present, and it was not clear that this was always a safe proceeding.

Dr. HINGSTON remarked that it was a common thing for a farmer to open the distended abdomen in cattle.

Dr. WOOD showed a patient of his recovering from a lengthened attack of sycosis and read a paper on this subject which will appear in our next issue.

Dr. SHEPHERD said it was easy to diagnose sycosis from acne and eczema, and spoke highly of Shoemaker's treatment of parasitic skin diseases with the oleates.

Dr. BLACKADER gave his experience in treating *tinea tonsurans* by means of oleate of copper ointment. Thirty cases occurred among the children of the Hervey Institute during the past spring and summer. Marked improvement and cure followed the use of an ointment of the strength of from 1 to 8 to 1 to 12, very little irritation being produced.

Dr. CAMERON said dermatologists were finding out that vaseline, though very elegant, was not so useful a vehicle as lard for making ointments intended to cure the parasitic skin diseases. Lard, having more affinity for animal tissues, penetrates deeper. The best vehicle for oleate of copper is oleic acid. The oleic acid, of English manufacture, should first be heated, after which the oleate of copper is to be stirred in.

Dr. HINGSTON said it was necessary to make first a correct diagnosis between eczema and tinea sycosis. Tinea sycosis is a simple inflammatory disease, so that parasiticides were not necessary. He uses epilation of the diseased hairs only, a bread and milk poultice, and attendance to the digestion. He always cures this way, and in a few days.

Dr. CAMPBELL had seen six cases of the parasitic form of sycosis, and only one of the non-parasitic. He had been successful in curing six or eight cases of tinea tonsurans lately with the oleate of copper ointment.

The PRESIDENT made a few remarks, in which he said that he had seen but very few cases of this parasitic form of sycosis.

Progress of Science.

SULPHUROUS ACID IN SCARLATINA MALIGNA.

Dr. Keith Norman McDonald, writing to the *British Medical Journal*, denies the prevalent opinion that no reliance can be placed on any drug in cases of scarlatina, and does not hesitate in affirming that, when properly applied, both locally and internally, sulphurous acid is by far the most efficacious remedy that we possess. He continues, "I have had several opportunities of testing its efficacy in some of the worst cases I have ever seen, during the epidemic which has been rife in this town (Cupar Fife) for the last two months, and I am bound to say that of all remedial measures in this disease it is, in my opinion, the most reliable. My treatment is as follows: The moment the throat begins to become affected I administer to a child, say about six years of age, ten minims of sulphurous acid, with a small quantity of glycerine in water, every two hours, and I direct the sulphurous acid spray to be applied every three hours to the fauces for a few minutes at a time, by using the pure acid in severe cases, or equal parts of the acid in water, according to the severity of the case. Sulphur should be burned in the sick-room half a dozen times a day, by placing flower of sulphur upon a red-hot cinder, and diffusing the sulphurous vapor through the room until the atmosphere begins to become unpleasant to breathe.

"In the worst cases, where medicine can not be swallowed, this and the spray must be entirely relied upon; and the dark sordes that collect upon the teeth and lips should be frequently laved with a solution of liquor potassa permanganatis of the strength of about one drachm to six ounces of water, some of which should be swallowed, if possible.

"In cases presenting a diphtheritic character, the tincture of perchloride of iron should be administered in rather large doses in a separate mixture with the chlorate of potash, and equal parts of the same with glycerine should be applied locally with a camel's-hair brush several times in the day; but as in the majority of cases among children it is next to impossible to use a local application more than once, the spray and permanagate solution will prove of great service.

"As to other remedies recommended by various authors, ammonia is nasty, and can not be taken well by children: carbolic acid has the same fault, and cannot be applied properly. Gargles are also useless in children, because they seldom reach the diseased surfaces, and warm baths and wet-sheet packing are dangerous, because they are never carried out properly in private practice. The hypodermic injection of pilocarpin is a remedy that may give good results hereafter, but I have had no experience in its use."—*N. Y. Med. Jour.*

GOOD REMEDIES OUT OF FASHION—EMETICS IN BRONCHITIS, STOMACH DERANGEMENTS, &c.

By CHARLES J. HARE, M.D., Cantab., F.R.C.P., &c., London.

Sometimes with us not only do things come into, but they also go out of fashion; and remembering as I do the days of yore, I think that, deluged as we now are with so-called new remedies such as hydrastin, iridin, sanguinarin, baptistin, glonoin, gelsemin, euonymin, mucuna, muscarin, the quack chlorodyne (of which I never in my life prescribed a single dose), eucalyptin, thymol, ingluvin, asclepedin, and a host of others, the advertisements of which fill the pages of our journals, I think that some valuable plans of treatment have been allowed to fall into disuse, and that there are such things as "good remedies out of fashion."

It is not long ago that, in a very urgent case of bronchitis, I advised the administration of an emetic; when the gentleman whom I had been called to meet in consultation said, "Why, I never gave an emetic to an adult in my life." In former times, it was not unusual, on the contrary, to commence the treatment of many diseases with the administration of a dose to procure vomiting; and although the remedy might then be given, sometimes indiscriminately and according to routine, only those who have seen the effects of emetics, properly and judiciously given, can conceive the beneficial effects they sometimes produce. In the early stage of an attack of croup, it was by no means unusual to give an emetic of tartarised antimony or of ipecacuanha; and it is in accordance with the experience of some of the best authorities and most practical men, and quite consonant with my own experience too, that symptoms which presented the most certain augury of a severe attack were by these means cut short, the hoarse voice resumed its natural character, and the feverish symptoms were in a few hours relieved. I know quite well that a great fear its entertained by some as to the depressing effects of emetics; but the fear is theoretical, and not practical, and those who have had most experience in the administration of them best know how groundless the fear is. In diphtheria, too, I have seen the false membranes which are out of reach of local remedies, and which the patients cough and cough in vain, and utterly exhaust themselves to get quit of, readily brought up by the action of vomiting, to the immense relief of the sufferer.

In suffocative bronchitis, the effect of emetics is sometimes magical, and by their administration in such cases not only is immense relief given, but I verily believe—I am certain—that lives are saved. You are called to a patient who has been ill a few nays, with increasing dyspnœa; she is sitting up in the bed (I draw from nature), for to lie down is impossible; she is restless, and tossing about;

the lips, and indeed the whole face, blue; the eyes watery and staring; the pulse quick and small; the cough constant; the expectoration semi-transparent and tenacious; over every square inch of the chest, front and back, from apex to base, you find abundance of bronchi; moist, sonorous and sibilant in the upper part of the lungs, and mucocrepitant, or mucous *râles* toward the bases. Ammonia and stimulants, right and good in their way perhaps, in such a case are too slow in their action; the patient is, in fact, more or less slowly, more or less rapidly suffocating. An emetic of twenty-two grains of ipecacuanha in an ounce of water is given; in ten or fifteen minutes, the patient vomits and brings up a huge quantity of that tenacious mucus, and the whole aspect of the case is altered; the distressed countenance is relieved; the breathing is at once quieter; and the patient is able for the first time for the past twenty-four hours to lie moderately low in bed, and to get some sweet refreshing sleep. The patient is, in fact, rescued from the extremest peril, and in this case, and in many similar ones too, I believe, from otherwise most certain death. Of course, in such cases the emetic is not given for its effect on the stomach, but for its collateral effect in mechanically clearing out the enormous amount of secretion which accumulates in the bronchial tubes, and which the patient is otherwise quite incapable of getting quit of; and thus the half choking, almost asphyxiated, condition is changed for one of comparative comfort, and time is gained for the action of other appropriate remedies. No doubt the secretion may, and often will, accumulate again; and I have not hesitated again in a bad cases to repeat the same good remedy; but it is a fact, and a very positive one too, that, quite contrary to what those who have had no experience in the plan suppose, the system rallies instead of being more depressed under the action of the remedy; and, in the language of one who had had thirty years' experience in the beneficial effects of ipecacuanha in some cases of exhaustion and sinking."

THE RELIEF OF TOOTHACHE.

Dr. Kenneth W. Millican thus writes, in the *British Medical Journal*, September 1, 1883: Possibly the following may be of use. I have found it very successful. It is a modification of a method recommended by Professor Babaieff to the Caucasian Medical Society. Melt white wax or sparmaceti, two parts, and, when melted, add carbolic acid crystals, one part, and chloral hydrate crystals, two parts; stir well till dissolved. While still liquid, immerse thin layers of carbolized absorbent cotton-wool, and allow them to dry. When required for use, a small piece may be snipped off, and slightly warmed, when it can be inserted into the hollow tooth, where it will solidify. The ease produced by this simple method is really very great.

THE RATIONAL TREATMENT OF DYSENTERY.

The *Med. Record*, October 20, 1883, tells us that Dr. KOBRYNER (*Bull. Gen. de Therap.*, June 15, 1883), deprecates the routine treatment of dysentery:

The proper treatment, he thinks, consists in fulfilling the indications presented by the disease, and not in the routine method, based on pure empiricism, of forcing down immense doses of ipecacuanha. There are, he argues, five special indications to be followed in the treatment of the grave forms of dysentery. The first is to rid the patient of everything that may aggravate or keep up the morbid condition. This end is to be attained first by the administration of an emetic. In the milder cases this is not necessary, as the onset of the disease is usually preceded by a longer or shorter period of general malaise, when there is but little appetite. The patient eats only a little light food, and the stomach consequently is nearly or wholly empty. In dysentery of severe type, on the contrary, especially in times of epidemic, the invasion is sudden, and the patient may be seized shortly after the ingestion of a full meal. The process of digestion is suddenly arrested, and the stomach must be relieved of its load as speedily as possible. Then the rest of the digestive tract requires attention. The intestines are filled with a quantity of fecal matter which must be got rid of. This is to be accomplished by the administration of any of the ordinary salines or laxative mineral waters. In mild cases this is all the treatment usually required. The second indication is to moderate the fever. This end Dr. Kobryner attains by a restricted diet. When the fever is high the fast must be absolute, but as soon as it begins to fall some light soup may be allowed. Solid food is not allowed until the patient is absolutely free from fever. Infants at the breast may be permitted to nurse, but must take only a little milk at a time. They should not be urged if they refuse the breast. In bottle-fed infants, milk is not allowed, but they can have only light broths and a little albumen and water. The third indication is to relieve the colic. While opium is the specific for pain, it is not to be thought of in dysentery. Notwithstanding all our efforts to unload the bowels, it often happens that hard fecal masses are expelled from time to time, and if opium is given they are retained and increase the irritation. The remedy for the colic of dysentery is calomel. In spite of its ordinary action in increasing the intestinal discharges, it relieves the pain, and, in this case, diminishes the number of the dejections. The fourth indication is to restore the blood to its normal richness. This is a most important part of the treatment, and is best accomplished by perchloride of iron in doses of eight drops per diem for nursing infants, and a proportionate amount for older patients. In addition to this may be

given a drink of white of egg in water (the whites of six or eight eggs to a quart of water). It is not until the sixth or seventh day that the signs of impoverishment of the blood become evident, so that the treatment by iron and albumen is not to be begun until that time. The last indication, which is met with in only a certain proportion of cases, is to treat the intermittent character of the symptoms. Quinine is the remedy here.

PEDIATRIC APHORISMS.

The *Obstetrical Gazette* quotes the following aphorisms of Prof. Letamendi (El Dictatem). They contain great truths and offer food for reflection and study not only to the physician but every parent.

1. Children are like the mob; they always complain with reason, although they cannot give the reason why they complain.

2. Always look at the lips of a pale and sickly child; if they are of a deep red color, beware of prescribing tonics internally. At the outset you will congratulate yourself, but in the long run you will repent of having employed them.

3. As a general rule, a sad child has an encephalic lesion; a furious child, an abdominal one; a soporific child has both, though indistinctly defined.

4. An attendance on children produces in the mind of an observant physician the conviction that the half, at least, of adult transgressors are so through morbid abdominal influences.

5. A sunny living room, a clean skin, and an ounce of castor oil in the cupboard, these are the three great points of infantile hygiene.

6. To dispute the clinical value of tracheotomy in croup is waste of time to no good purpose. Croup or no croup, if there be a positive obstruction to respiration in the larynx, it is but according to reason to open a way for sublaryngeal respiration. In the days of more knowledge and less nonsense, tracheotomy will be ranked among minor surgical operations.

7. Dentition is a true multiple pregnancy in which the uterus and its fetuses become petrified in proportion as they grow. It is not the direct or the eruptive pressure, but the lateral pressure of all together, that is the most dangerous. It is from this that so many cerebral symptoms appear which can in no way be relieved by incision of the gums. The only recourse against the danger of this transverse pressure is to give the child more nourishment, in the hope that as the general condition is bettered the local condition will also improve.

8. If the incisors of the first dentition are serrated it is bad, but if those of the second formation are the same, it is worse. It foretells a number of lesions are arising from deficiency of mineral salts in the tissues. There is one only exception, and it is an important one. When the serrated incisors are seen in strong children in whom the fontanelles have closed early, it is a sign of a robust constitution. Instead of a number of small and sharp dentitions, there are a few large blunt ones.

9. To regard the eruption of the teeth as the sole factors in the general process known as the first dentition, is to perpetrate a sort of a medical synecdoche. Children get their first teeth because they are at the same time getting a second stomach and second intestines.

10. The body of a child possesses such a degree of "acoustic transparency" that in cases of necessity or convenience auscultation may be praticed with the hand, converting it into a telephone which will reveal as much to the physician as ever his ear could do.

11. In practice it is well to distinguish with precision a case in which disease is due to lumbricoids from one in which lumbricoids are due to disease. For in the former case anthelmintics are of service, but in the latter they do harm.

12. Since, until a child is able to speak clearly, his relations with the physician are purely objective, it is very necessary that we should study as carefully as do the veterinarians the exact correspondence between lesions and the expression of the patient.

13. If you wish to cure rapidly and well joint-disease in infants, you must treat them as you would a conflagration—douches, douches, and more douches, until you have succeeded in extinguishing them.

14. The entire system of the moral relation between children and adults should be changed. To speak to them incorrectly merely because they cannot pronounce well; to excite their fears and arouse their weird imaginations simply because they are easily frightened and impressionable; to stimulate their vanity because they are naturally inclined to be vain, these and other similar actions are not only wrong, but absurd.

15. There is finally a danger to the women of contracting a vice as yet unregistered in the annals of concupiscence—mastomania, or the sensuality of nursing. When this physiological act degenerates into vice, nursing becomes so frequent as to be nearly continuous, and the result is ruin to both mother and child. Finally, the physician must here, as always, be at once wise, discreet, of good judgment, and firm.

TREATMENT OF EARACHE.

It is said, that, by the following simple method, almost instant relief of earache is afforded: Put five drops of chloroform on a little cotton or wool in the bowl of a clay pipe, then blow the vapor through the stem into the aching ear.

KINNER: REMARKS ON OTTORHEA IN CHILDREN

(Amer. Jour of Obstetrics, November.*)*

Purulent discharge from the ear is one of the most common symptoms of aural disease. Otorrhea comes on gradually with little pain, and although the smell from the discharge is sometimes very offensive it is frequently allowed to continue for months. As one of the causes of otorrhea we may mention catarrhal condition of the meatus and tympanum, in which inflammation may spread to the mastoid cells, and finally the brain. The prominent symptoms are rigors, tongue very furred, rapid pulse, increase of temperature, and pain and swelling of the parts around the ear, which parts assume an erysipelatous appearance. The history of an illustrative case is given in which a strumous child, aged six years, had an inflammation of the meatus and tympanum of left ear, which spread to the mastoid region, producing an abscess. This was repeated several times, when finally a polypus was discovered in the meatus, which was removed by the wire-snare. Eventually there was recovery in the mastoid region, but the membrana-tympani was perforated, and hearing destroyed. Many cases of mastoid inflammation ought not to go on to suppuration if properly treated. The plan of treatment adopted on detecting pain or tenderness over the mastoid region and around the ear is, first to paint a strong solution of nitrate of silver (3ss to ℥j) or several layers of equal parts of tincture iodi and lini iodi, or with pot. iodi cum sapone, having previously applied leeches if much swelling and redness exist, and subsequently follow up the treatment with warm fomentations or poultices containing a little opium. As regards the treatment of otorrhea by dry powders, the plan adopted is to cleanse and dry the ear well with a piece of cotton-wool twisted upon the end of a grooved ear probe, then with an insufflator introduce into the meatus whatever powder seems suitable for the case; a small quantity of cotton-wool is then lightly placed in the meatus to prevent the powder falling out. This treatment is renewed night and morning. The practice of stuffing the meatus with various powerful astringent powders, pushing the powder firmly in by means of some small instrument, and then closely packing with cotton, cannot be free from danger. The various powders used are boracic, tannic, and gallic acid, alum, iron-alum, copper, lead, zinc, and so forth. If the wet treatment is preferred, the various astringents may be used; boracic acid in the proportion of one drachm of the acid to an ounce of rectified spirit makes a very nice lotion, or carbolic acid and sulphate of zinc, four grains of each to an ounce of water, or a saturated solution of boracic acid in hot glycerine, or glycerite of tannic acid. The following are a few good lotions:

℞—Acid. carbol., gr. iv.
Sodæ bicarb, gr. xij.
Sodæ bibor., gr. xij.
Glycerine, ℥ss.
Aquæ, q.s. ad. ℥i.

Ft. lot. ad aurem

℞—Zinc oxide.
Bismuth oxid., aa gr. v.
Glycerine, ℥ss.
Aquæ, ad. ℥i.

In connection with the above treatment great benefit will be obtained by the use of the Politzer bag.

SANTONIN.

Dr. Lewin advises to give santonin only in solution; and shows that in that form it reaches the small intestines more surely, is not absorbed too quickly, and is more destructive to the round worm (ascaris lumbricoides) which inhabits the small intestines, than when given in any other form. He mentions several prescriptions, of which we select the two following:

℞. Santonini,..... gr. iij;
Ol. ricini, ... f. ℥ss;
Ol. cinæ. eth., ... gtts. iv.

Sig. A teaspoonful two or three times daily or, if elastic capsules can be taken,

℞. Capsul gelatin. elast.,
Santonini,..... gr. i;
Ol. ricini,..... f. ℥i;
Ol. cinæ. eth., ... gtt. i;
Reple., ... No. iv.

Sig. One to be taken two or three times daily.

Santonin is also useful for the long thread-worm (trichocephalus dispar.) which resides in the cecum, and the thread-worm or seat-worm (oxyuris vermicularis) which inhabits the colon and rectum; it must there also be given in oily solution, but as an injection per rectum. *(Berlin Klin Woch.)*

SOLIDIFIED CREOSOTE.

In its application to carious teeth, creosote is often inconvenient in consequence of its fluidity producing ill-effects upon the mucous membrane of the mouth. This may be obviated by giving to it a gelatinous solidity by adding ten parts of collodion to fifteen of creosote. This, besides being more manageable than liquid creosote, also closes up the orifice in the tooth, preventing the accession of the air to the dental nerve.—*Progrès Medicale.*

TREATMENT OF COLDS.

A "cold" having been contracted, what is the best means of throwing it off? The answers to the question are legion, for they are many. In domestic practice hot, stimulating drinks have from time immemorial been held to be the best, and that they are very effectual does not admit of question. Full doses of quinine and Dover's powders have, probably, a larger number of advocates in the profession than obtains for any other means. For a number of years we have, however, relied quite exclusively on the treatment recommended by Dr. Dobell, of the Royal Hospital for Diseases of the Chest, London, and have come to regard it as the most effectual of any yet suggested: 1. Give 5 grains of carbonate of ammonia and 5 minims of liquor morphia (B. P.—morphia, gr. 1-6) in an ounce of almond emulsion, every three hours. 2. At night give ʒ jss. of spts. mindererus in a tumbler of cold water, after the patient has got into bed and been covered with several extra blankets. Cold water should be drunk freely during the night when there is thirst. 3. In the morning the extra blankets should be removed, so as to allow the skin to cool down before getting up. 4. Let the patient get up as usual, and take his usual diet, but continue the ammonia and morpha mixture every four hours. 5. At bedtime the second night, give a compound colocynth pill. Usually about twelve doses of the mixture will be found sufficient, but should the catarrh show any disposition to return after leaving off the medicine for a day, another six doses may be taken and another pill at bedtime. The beauty of this treatment lies in the fact that it does not interfere with the patient's business, and does not expose him to fresh attacks of cold, which are liable to follow exposure to the outer air after a course of hot, stimulating, diaphoretic drinks.—*Medical Age.*

FISSURED NIPPLE.

Pulverized gum-arabic is recommended as a simple and safe agent for cracked nipple. Immediately after the child has sucked, the powder should be dusted over the surface and the nipple protected from the air.—*Exchange.*

SUPPOSITORIES IN PILES.

The following formula is recommended for piles:

℞ Iodoformi,	ʒ i.
Balsam Peru,	ʒ ii.
Ol. Theobromæ,	
Ceræ alb.,	aa ʒ iss.

Divid. in suppos. No. 12.

Introduce on eafter each evacuation.

CLARK: A LETTER ON THE SUBJECT OF HYPODERMIC INJECTION OF MORPHIA IN INFANTILE CONVULSIONS.

(*Amer. Jour. of Obstetrics*, November.)

Three cases are reported. In the first a child of four years eight months had one-twelfth of a grain of morphia sulph. administered subcutaneously. Seeing no effect in twenty minutes, one-sixth of a grain was given in the same way. The convulsions soon ceased, but the child died in about a week of meningitis. Second case, child three years four months; one-sixth of a grain of morphia hypodermically; convulsions almost immediately ceased. The child died the next morning in another convulsion. Third case baby two months old; one-sixth of a grain of morphia hypodermically; convulsions ceased, and the baby made a good recovery. Fearing an overdose a little belladonna was administered, but the doctor thinks that in the convulsive condition an extraordinary tolerance of opium obtains. One-fourth of a grain of morphine is not too much to administer subcutaneously to a child two years old in convulsions. This will not be apt to need repeating.

HUGHSON: NOTE ON HYPODERMIC INJECTION OF MORPHIA IN CONVULSIONS OF CHILDREN.

(*Amer. Jour. of Obstetrics*, October.)

A boy, two years old, was brought by his father to the doctor's office, having been in convulsions for about an hour. Valerian, cold cloths to head, and sinapisms to back of neck and extremities were applied without avail. In a short time the child was totally unable to swallow, and appeared to be rapidly sinking into a dying condition. As a last resort about one-fifteenth of a grain of morphia sulph. was injected into his arm. In ten minutes he was quiet, and in twenty minutes was sleeping nicely. He had no return of the convulsions and made a good recovery. The doctor has determined in the future to resort to this treament in severe cases. The hypodermic use of morphia in large doses in puerperal eclampsia is believed by many surgeons to surpass the ordinary treatment by venesection, chloral, and so forth.

FOR CHAPPED HANDS AND FROSTED FEET.

Dr. Carl Seiler (*Polyclinic*, Jan. 15) calls attention to the value of tincture of benzoin in the treatment of chapped hands and frosted feet. It is applied by simply painting it on the skin. The stockings may be prevented from sticking to the feet by rubbing some oil over the benzoin.

A RELIABLE TÆNIAFUGE.

℞ Extract filicis maeis,		ʒ iss,
Pulveris kamalæ,		ʒ ij,
Mucilaginis acaciæ,		
Syrupi simplicis,	aa	ʒ ij,
Aqua cinnamoni, ad,		℥ iij. M.

Sig.—Half to be taken at bed-time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this, in the *Medical Digest*.

THE CANADA MEDICAL RECORD

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EDITORS:

FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. LOND
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MONTREAL, JAFUARY, 1885.

ADHESION OF THE OMENTUM IN ABDOMINAL SURGERY.

With ordinary care in preventing hemorrhage and in staying that which does occur adhesions of the peritoneum and of the pelvic and abdominal organs covered by it do not present any very serious obstacle to the success of the average ovariotomy, hysterectomy, etc. Still there are results of adhesive inflammation that render the removal of abdominal tumors both difficult and dangerous. We saw an illustration of this lately in the case of a patient in the Western Hospital who underwent the operation for double oophorectomy. The adherent omentum was found to cover completely the whole abdominal contents, being attached in several places low down in the pelvis. The history of the case was distinctly that of repeated attacks of local peritonitis, the enlarged and thickened apron having itself been the subject of repeated attacks of inflammation.

The possibility of this condition of things ought to be ever present in the mind of the operator, otherwise it is likely to confuse him and thus lead in his efforts to get *behind* or perhaps *through* the obstruction to dangerous lesions and serious inflammation of the vascular omentum. In his instructive article on Diseases of the Fallopian Tubes in a late number of the New York *Medical Record* Dr. Gill Wylie refers to this subject in connection with the operation for removal of diseased tubes and ovaries as follows: "Where the omentum is free from adhesion it can be pushed up as one would the end of an apron. When it is adherent, as it often is, to the broad ligament and anterior wall or top of the uterus, it cannot easily be separated by pulling it from below upwards; but by passing the two fingers well to one side and getting them underneath, and separating the adhesions, many formidable looking cases can be easily managed. As the adhesions separate they should be lifted through the opening and any bleeding points tied. If the adhesions are strong and vascular, as they may be in those cases where there have been repeated attacks of local peritonitis, then the omental adhesion can be tied off, tied as low as possible, and then a little above this, and cut between the ligatures. By pulling the sides of the abdominal opening laterally with retractors we can do this without enlarging the opening in most cases.

In handling and trying the omentum care should be taken not to split or tear it, for it will invariably bleed up in the angle of the split and may be very troublesome."

Dr. Wylie was for many years Dr. Marion Sims', assistant, and he has known that celebrated gynecologist close the abdomen rather than run the risk of going through the omentum to reach the ovaries beneath it. Although the experienced surgeon may by means of some such simple procedure as that described by Wylie remove the barrier it will readily be seen how embarrassing and how formidable such a state of things might prove to the inexperienced operator.

COCAINE CHLORIDE.

A very considerable degree of interest has been manifested by the Medical Profession in the usefulness of hydrochlorate of cocaine as a local anæsthetic.

A medical student of Vienna, named Koller, has discovered that a 2 per cent. solution of the hydrochlorate of cocaine when dropped into the eye in quantities of first 2 drops and then of 3 drops, with ten minutes interval, gave, after another ten minutes interval, an anæsthetic condition of the cornea and conjunctiva, which remained for 10 to 20 minutes and then gradually passed off.

Cocaine is the alkaloid of the leaves of a shrub (the erythroxylon coca) which grows and is cultivated in South America, especially in Peru and Bolivia.

The natives there chew the leaves, and profess to derive from them greatly increased power for physical labor. It has been used in a similar way in Canada, with a like object, and the same result. It has not yet apparently given to any one any insensibility to mental fatigue.

A poisonous dose produces death in the warm-blooded animals, who are less affected by it than the cold-blooded ones, by paralysis of the respiratory centre. Its toxic effect is small and its action not cumulative.

The installation of a 2 per cent. or a 4 per cent. solution into the eye renders the conjunctiva and cornea insensible to the knife. If, however, the incisions are to be carried much deeper, as for instance in the operation for squint, then, before dividing the muscles, the solution must be applied within the incision, when, after a few minutes interval, the operation may be completed without causing the patient any pain.

It is a mydratic, though much feebler than atropia, and its mydratic effect soon passes off. From the paleness of the conjunctiva which follows its application it would seem that it causes contraction of the conjunctival vessels.

It has also been used in gynecology to render the mucus membrane of the vagina and cervix uteri insensible to operations performed upon them, and with success.

It has been found useful in laryngeal phthisis, and in operations performed upon the mucus membrane of the nose, the membrana tympani, and the lower end of the rectum and anus.

It has also been recommended in the treatment of the morphia habit and in alcoholism. In these latter cases, a solution of the hydrochlorate has been used hypodermically.

There is certainly a very large class of cases where an agent possessing the properties attributed to the hydrochlorate of cocaine would be of very great value to both operator and patient. There are a large group of every-day cases, where the question arises, which is easiest borne, the anæsthetic or the pain of the operation without the anaesthetic? and it is in these cases particularly that cocaine may become useful.

Its use is so far limited to rapidly absorbing surfaces as mucus membranes; applied to the skin it has but little, if any, effect.

LOCAL AND GENERAL.

Liftré, the author of the dictionary, is said to have so regulated his life during the thirteen years he was writing his great work as to give the least possible time "to the current requirements of existence." He rose at eight o'clock and wrote for an hour while his room was being put in order. Probably he also kept an eye on the housemaid, and saw that she did not "arrange" his books and papers so that it was impossible for him to find anything after the operation had been completed.

Then he read proof until the midday meal; wrote again from one to six, and, taking one hour for dinner, returned to work and kept it up until three o'clock in the morning, or until the allotted task was completed. Then he retired to rest, to rise at eight o'clock and repeat the routine of the previous day *ad finem*. In this way he managed to prepare 415,636 pages of manuscript.

And yet this man lived to a good old age, and nobody can say that his was not a useful life, and probably a satisfactory one to himself, even if he did not die in the odor of sanctity. Still one's intellect is forever dependent upon an organism prone to resent overwork, and I believe it to be the

duty of the physician to discourage undue mental exertion. From our ancestors, who might generally be described as a hardy race of men with great stomachs and no brains, we are developing into a physically inferior race with large brains and irritable digestive apparatus.

A judicious exercise of mind and body should be the aim of the man who would make the most of himself. As I write there is too much athletics in the air, but doubtless it may do good by enticing the bookworm from his books and by making the pale student breathe the cold, exhilarating air and exercise his flabby muscles. At any rate, if we must have an extreme in Canada, by all means let us raise muscular, eupeptic, broad-chested, good-natured samples of Anglo-Saxon mediocrity, rather than dyspeptic, myopic, anæmic geniuses, with abnormal brains and endless stores of knowledge.

The *Popular Science Monthly* indirectly touches upon this subject when it refers to the action of the American Council of Education in the matter of school recesses.

The committee appointed to report upon the subject, summed up the *pros* and *cons* as follows : The opponents of the recess claim that the adoption of their measure will conserve the health of pupils by preventing exposure ; that it will tend to refinement by removing opportunities for rude behavior and boisterous play ; that it will take away the opportunity for association with the vicious and consequent corruption of morals, and that it will make things easier for the teachers. The report replies to these allegations in this style, an answer which most of us will, I think, believe to be ample : exposure to the weather during recess is beneficial, not hurtful : it gives a change from the close, foul air of the school room to the free air, with opportunity to relieve physical wants, and affords a means of ventilating the schoolroom without chilling the scholars ; that the "rude and boisterous play" of recess is only a rehearsal of what is indulged in outside of the schoolroom, with the advantage that the teacher is present to prevent excess, and that it gives needed exercise ; that moral corruption is not generated in the open practice of recess, but in secret intercourse ; and that the teacher's office is not to make things easy for himself, but by every means in his power to promote the well-being of his pupils.

Prof. Austin Flint's admirable address on "Medicinal and Non-Medicinal Therapeutic" has been widely copied and much extolled, but it appears to me that much of the material of the address can be shown to have been derived from well-known sources.

For example, his denunciation of that domestic superstition commonly called "catching cold" is almost an exact reproduction of Felix Oswald's ideas upon the subject. I have not the latter author's "Physical Education" before me nor all of his papers on "Remedial Education" (*vide Popular Science Monthly*, 1883 and 1884) but I know that it will be found in either or both of the places indicated. At any rate Dr. Flint's address is but an indication of the return all along the line of surgery and medicine to "natural" therapeutics ; already hygienic precautions and the common-sense pharmacopeia bid fair to take the place of a blind faith in the efficacy of drugs. In the meantime the cool-headed doctor will neither be a partisan of men like Bartholow, "the drug worshipper," nor a follower of "drug despisers," like Dr. Oswald. It is well to recognize the value of such pharmacopeial preparations that have stood the test of time and experience, giving them only when necessary, and refusing at the same time to dose a patient because some enthusiast has declared that miracles have been wrought thereby.

Peculiarly difficult is it, it appears to me, to place anything like a proper value on proposed remedies about which there has not been for years a concensus of approval. Temporary enthusiasm should not count for much with those who have not an opportunity to judge for themselves in hospital practice or elsewhere. Wait a year or so. All of us will remember the contrast between the predictions and results in the case of croton-chloral-hydrate, nitrite of amyl, bromoform, cundedango, electricity, salicylic acid, the antiseptic spray, and other remedies too numerous to reconnt. Of course this is true of other things besides medicine ; it is only a fair sample of the tendency of human mind to run to extremes.

No ; cocaine hydrochlorate, muriate. or more properly *chloride* ($C_{17}H_{24}NO_4CL$), has nothing to do with that edible substance called *cocoa* or chocolate. The latter is derived from the bean of the *theobroma cocoa ;* the former is a salt of a rare and expensive alkaloid (present value $5,000 per pound) obtained from the leaves of *erythroxylon coca*, a native of Peru and Bolivia. This is the plant about which such remarkable stories have been told regarding its tonic and stimulating properties—how the natives can travel for days without either food or sleep by simply chewing the leaves. The alkaloid is the active principle of the plant, and until recently was considered as a chemical curiosity. The chloride is not the only anæsthetic salt, as the citrate has lately been employed by German dentists for "preparing" sensitive teeth before filling them. It is made into small pellets which are wrapped in wadding and placed in the hollow of the tooth. All sensation is soon destroyed, and the tooth can easily be cleaned out and filled without pain.

P. A. LAVER, M.D.

MONTREAL, January 15, 1885.

PERSONAL.

The Hon. Dr. Robitaille, ex-Lieutenant-Governor of the Province of Quebec, has been nominated a Dominion Senator, in place of his brother, who has resigned.

The Hon. Dr. Ross, Premier of the Province of Quebec, had recently a large public dinner given to him at Three Rivers by his political friends.

Dr. Roddick, one of the editors of the *Canada Medical and Surgical Journal*, Montreal, who was quite unwell recently, is, we are glad to say, once more able to return to active work.

Dr. J. Brodie, formerly Demonstrator of Anatomy in Bishop's College, who has been practising in Honolulu since his removal from Montreal, about five years ago, has lately taken unto himself a wife from among the fair daughters of California. Dr. Brodie has a large and remunerative practice in his Pacific home. We wish the doctor and his wife success and happiness in all their undertakings.

Dr. A. A. Browne, Professor of Midwifery in McGill University, has resumed his lectures, having recovered from the illness which confined him to the house for a short time.

Dr. Godfroi Dubuc (C.M., M.D., Bishop's, 1872), of Sutton Flats, Que., has removed to Chicopee Falls, Mass.

Dr. Osler, of Philadelphia, late of Montreal, visited his friends here during his Christmas vacation. We dropped in upon him at his new home in Philadelphia, while in that city for a day, the middle of this month, and received a cordial welcome.

Dr. Gerald Howard, son of Dr. R. P. Howard, Montreal, has successfully passed the examination for the Fellowship of the Royal College of Physicians, London.

Dr. Colin Sewell, of Quebec, who has been seriously ill, is, we are pleased to learn, now quite convalescent.

REVIEWS.

A Practical Treatise on Diseases in Children. By EUSTACE SMITH, M.D. New York: Wm. Wood & Co.

Dr. Smith has written this book in a careful and concise manner, discussing the whole subject of disease in children. From his large experience he has been able to dwell upon the clinical features to be observed, and thereby has produced a work valuable on the diagnosis and treatment of infantile disorders. Prominence has been given to the diet and hygiene required. The physician will find a perusal of the contents valuable and instructive.

A Manual of Obstetrics. By E. L. PARTRIDGE, M.D., with sixty illustrations. New York: Wm. Wood & Co.

The author in attempting to outline the knowledge of obstetrics in this very small manual has certainly accomplished his aim. It is very concise, yet not at all obscure. Such manuals can only refresh the memory, for which purpose they are intended, and from this point of view we can recommend it as a book to be slipped into the pocket of the practitioner whose time does not permit a careful study of more extensive textbooks.

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SYCOSIS AND ALLIED AFFECTIONS.

By GEO. A. WOOD, M.D.,

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(Read before the Montreal Medico-Chirurgical Society.)

There are few medical terms which have undergone such little change in definition as sycosis. In the therapeutical classification of skin diseases adopted by Celsus it was included among those local diseases amenable to treatment by medicine, and was defined to be a tuberculated eruption on the hairy parts of the face. For Celsus, good Roman though he was, adopted the Greek name of the affection, which Erasmus Wilson refers to group "Objective" division or sub-group "Figure" in an attempted classification of the terms employed by Hippocrates and probably by Æsculapius.

And, broadly speaking, any disease affecting the hair and hair follicles of the face is now also called sycosis.

It is true that a well-educated practitioner would not stop at satisfying himself that he had a case of capillary folliculitis—he would enquire further as to the cause and nature of the inflammatory change; and it is also true that in late years the various pathological processes that manifest themselves in the different parts of the hair and its follicle are well defined, but the very difference in the nomenclature adopted by different dermatologists do not seem to have altered the general meaning of the word as adopted by Celsus, and perhaps by Hippocrates.

In 1854 Erasmus Wilson called sycosis a form of "disease" and in 1871 he describes it as including several varieties and degrees of disease. Squire, in Reynolds' System, confines the term to that "disease of the hairy parts of the face caused by the presence in the root sheath of *microsporon mentagrophytes*." Liveing speaks of sycosis as a non-contagious disease of the hairy face which is neither eczema nor acne nor a syphilide. He also takes a liberty with the term, and defines S. parasitica as the result of the ravages in the hair of the face of the *tricophyton tonsurans*. Pifford does the same; while George Henry Fox thinks that, though sycosis is a term which is loosely applied to nearly every affection of the bearded portion of the face, its use ought to be restricted to that inflammatory condition of the hair follicles and adjacent cellular tissue which is characterized by pustules perforated by hairs which in time become so loosened that they can be extracted by the gentlest traction of the epilatory forceps. Bateman and Bristowe follow the definition of Erasmus Wilson, while, in his Practice of Medicine, Roberts, speaking of sycosis as an inflammation of the hair follicles and sebaceous glands, says the condition may be brought about by various causes.

Without further multiplying authorities I think I have shown that I am justified, in the absence of agreement among authorities, in defining sycosis to be any disease of the hairy face affecting the root sheaths or follicles, which gives rise to induration and swelling of the interfollicular tissues. In this category, excluding the syphilides and lupus, are included at least three, and possibly four, distinct

affections—the best argument that could be adduced for dropping the term altogether, viz., pustular eczema, tricophytos is barbae, acne indurata and, it may be, sycosis proper. None of these diseases is common about the bearded face, and I can speak very diffidently about them from practical experience. Of the first, which is the commonest, and probably most important, viz., eczema pustulosum facei, I had a chance ten years ago to study a well-marked case. E. M., aged 35, was accustomed to be shaved regularly every second day, but was interrupted in the operation by observing on the left side of his chin a reddened nodule, that was not painful, but which discharged a thin fluid. From this point the disease spread over his chin, and gradually involved the most of one side and part of the other side of the face that had been covered with hair. When I saw him the chin and part of face were covered by dark crusts of half-dried discharge over-spreading nodular pustules. There was a good deal of itching and burning and to relieve this he was tempted to rub and otherwise irritate the disease patches. He had eczema of one eye-brow and a few pustular spots on the upper lip. When I last saw him he had greatly improved under treatment. When eczema involves the region of the mustache and beard in the male adult it extends to the follicular lining, increased secretion at once occurs, pus forms, and the follicle is converted into a small abscess cavity through the mouth of which the hair projects. The hairs in this way become loosened, and when closely examined are found to present an appearance which is almost characteristic of the disease, viz., each hair pierces a collection of pus which is either aggregated as a distinct white pustule or which, as it discharges from the mouth of the follicle, is often discolored by blood. These hairs are extracted without much pain. The diagnosis of the disease rests mainly upon the well-known character of eczema wherever it occurs. It usually extends to other parts of the face, is attended by burning, redness and itching, and the epilated surface is shortly covered by an eruption, scaly it may be, but always moist. In doubt the microscope.

Here, probably, is the proper place to discuss the question as to whether there exists a sycosis which is neither eczema nor acne nor a trichophytosis nor a syphilide nor a lupoid dermatites, whether, in other words, there is a disease of the bearded face which should in the words of G. H. Fox "alone be called sycosis, and which is that inflammatory condition of the hair follicles and adjacent tissue which is characterized by pustules perforated by hairs which in time become so loosened that they can be easily and painlessly extracted by the forceps." Liveing also considers sycosis to be synonymous with *acne mentagra*, and gives the differential diagnosis between it and pustular eczema. "We must bear in mind," he says, that pustular eczema is attended with more itching and general inflammation, while the discharge and crusts are more abundant than in sycosis."

In the absence, however, of any agreement as to the precise symptoms of this so-called distinct affection; when one author tells us that it may affect the pubes, axillæ and other hairy parts, when another assures us that it may be accompanied by some pain, a good deal of burning and some itching, and a third asserts that it is frequently accompanied by the moist patches of eczema, and that eczema may give rise to sycosis-and when, finally, we know that eczema may simulate almost every form and variety of cutaneous disease, the likelihood that most of us will be able to decide between these dermatologists and those that deny the distinct character of sycosis is indeed small. Furthermore, as the treatment of pustular eczema as laid down by the latter class is almost identical with that proposed for sycosis by the former, the question does not appear to me to be of great practical importance.

There can be no doubt but that the pustulo tubercular form of acne when it affects the bearded face has often been considered as a sycosis. And inasmuch as *acne indurata*, occurring in this situation comes readily within the definition of the term previously given it may legitimately be considered as a true sycosis. It is a non-specific, inflammatory, reflex irritative disease of the sebaceous glands, and in the more aggravated forms presents the fig-like, lumpy pustules, tubercles and crusts of sycosis. As Wilson says, the condition "is the protest of the fifth pair of nerves against ill-treatment received by the gastric portion of the eighth." To distinguish this from the other forms of sycosis it may be sufficient to observe that the skin between the eruption of acne on the hairy face is bright red, tender and dry, that it is nearly always accompanied by and is the result of gastric irritability, and that each nodule or abscess corresponds very closely to the opening of a sebaceous follicle, and that, finally, either come-

dones or acne vulgaris is also to be found on other parts of the face or between the shoulders.

A second form of sycosis is that disease of the hairy parts of the face in adult males due to the lodgment and development in that particular situation of *trichophyton tonsurans*. It appears upon the upper lip, chin, temples and cheeks. When the parasite proceeds slowly the hairs, follicles and skin are but little affected, but when the hair is abundant and the microphytic organism active it makes sad havoc of the beard and leaves nothing but a bushy stubble. The patch extends at its periphery, and other and similar patches may appear, and if these coalesce the typical circunerate form of the disease may be modified. In fact ringworm of the beard resembles ringworm of the scalp, and proceeds as it would in any other part of the body where the hair is unusually abundant. When the disease lasts for any great length of time the presence of the parasite sets up folliculitis and even cellulitis, which are productive of the tubercules and small abscesses so characteristic of sycosis. These local lesions so closely resemble those present in pustular eczema that the detection of the tricophyton by the microscope is the only sure method of diagnosis.

Gruby, in 1842, discovered this fungus which, according to Zeigler, belongs to the achlorophyllons thallophytes, group hyphomycetes. When it attacks the beard the fungus is found not only in the hair but in the follicle, and probably develops from the mycelium, whose favorite seat is the sheath of the hair. The spores of the plant are exceedingly small, about the $\frac{1}{5000}$ in, in diameter, and they are the active agent in transmitting the disease from one individual to another. After it has gained a lodgment in the follicle it invades the root of the hair, separating its fine fibres by mechanical pressure until it is rendered brittle and finally breaks off, leaving a ragged stump which protrudes from the inflamed and dilated follicle. If examined by the microscope, the minute spores may be detected either in groups or strung together into a kind of chaplet. Trichophytosis barbæ is the only contagious form of sycosis, and is commonly contracted in the barber's shop, hence the term "barber's itch" indiscriminately applied by the laity to all forms of sycosis. The popular idea is that it arises from the use of an unclean razor, but Fox thinks it is most likely conveyed to the exposed hair follicle by a damp, soiled towel which furnishes a capital nidus for the growth of such a vegetable parasite. The disease is rare in this country but is said to be common in France. The case which I present to you to-night is probably parasitic in its nature. Owing to prompt treatment by epilation and parasiticides but very slight traces of the tricophyton have been discovered. It began in one or two round patches which shortly developed into painless lumpy masses discharging a thin sero-pus. From these as a centre the disease gradually extended over the cheek. Under treatment the patch has greatly improved until it now presents a reddened scaly surface through which new hairs are growing up. There has never been any pain, burning, or itching nor any moist patches about the face. I was consulted last year by an elderly man for a skin disease of the right temple and cheek, which were covered by a reddened shiny cicatrix shedded here and there with a few unhealthy hairs. From the history of the trouble, which he told me originated many years before, I have no doubt I had to deal with an old and neglected trichopytosis barbae. That it is of great moment to discover the precise cause of the sycosis in a given case goes without saying. It simply means that we must decide whether we have to treat a ringworm, an acne, or a tubercular eczema. I am convinced that as far as sycosis parasitica is concerned that the failure to improve it at once and to cure it eventually is due to neglect in carrying out thorough and persistent epilation. Not only should every diseased hair be extracted but every new one should be treated in like manner. In practising extraction in old cases I would advise the operator to use a magnifying glass and small epilatory forceps and to grasp the hair as close to the skin as possible. The tricophytic parasite extends its ravages a sixteenth to an eighth of an inch above the level of the skin. If now the hair shaft be grasped very low down the root will be more likely to come away than if it be seized high up, as in the latter case it is almost certain to break off at the diseased point. In the early stages this does not so much matter since, unlike the course of the fungus in other hairy situations, the root sheath and the intra follicular contents are usually the first to suffer in parasitic sycosis. In these short notes I have said little or nothing about the prognosis and treatment of the different affections loosely called sycosis for the simple reason that I having nothing new to offer. Of

greater moment it seems to me is it to decide what sort of sycosis one has to deal with, because the prognosis and therapeusis of the case follow at once upon that, and also to settle if possible the debated question as to whether the sycosis of Liveing & Fox be a veritable entity or not. If I might be allowed to venture an opinion I should say that I do not think it exists and that a sycosis which is not an eczema or an acne is parasitic in its nature, and that a sycosis which is clearly non-contagious is either a severe local acne or some modification of pustular eczema.

MONTREAL, October 5, 1884.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Prof. Gynæcology University of Bishop's College.

Dr. Hoffman of Berlin, in a late report upon the progress of Gynæcology in Germany, speaks very favorably of the *running* suture employed by Schede of Hamburg—the cat-gut is prepared by immersion for 12 hours in a sublimate solution of 1-2 : 1,000, it is then soaked in juniper oil, by which it acquires great flexibility and strength. In several post-mortem cases the suture has been found firm and even after seven days. This running suture has been used in complicated plastic operations on the perineum and vagina with excellent results. Prof. Schroeder has used the same suture in closing intra-abdominal sacs in complicated laparotomies.

The advantages of this suture are so apparent that doubtless hereafter it will be a favorite mode of co-apting divided surfaces, both in gynæcological and general surgical practice. This form of suture was suggested to his class by Dr. Trenholme more than a year ago, although he did not employ it himself.

HYDRASTAS CANADENSIS.

Attention has been directed by the German Gynæcological Society to the valuable therapeutical value of this drug, prepared by Park, Davis & Co., of Detroit.

Prof. Schatz has tested its action, which he finds is exerted upon the mucous membrane, exciting their vessels to contract. In the female generative organs it diminishes the blood supply of the mucous membrane. It is found to act favorably in cases where ergot fails.

In metrorrhagias due to myomata, in hemorrhages in the purpureum, in metrorrhagias of young persons, from 15 to 18 years of age, and in those forms of endometritis where the curette has failed, its action has brought about favorable results.

In most cases the drug was used about a week before menstruation began, and the dose employed was 20 drops three times a day.

Boro-Glyceride.

Dr. W. Thornton Parker, of Morristown, N. J., strongly recommends boro-glyceride in the local treatment of vaginitis, leucorrhea, etc. Dr. P. prefers it to the sulpho-carbolate of zinc. It acts gently and efficaciously. The preparation manufactured by Messrs. Thurdon, Metcalf & Co., of Boston, is that which he uses and commends to others. A simple mixture of borax and glycerine does not yield the same satisfactory results.

INTRA-UTERINE TREATMENT.

Bandl (of Vienna) at the same meeting gave a paper upon this subject.

In cases of sterility where we can detect no alterations to account for it, he advises to draw down the uterus with tenaculum to about two fingers' breadth of the introitus vaginæ. This, of course, cannot be attempted if there is inflammation of the uterus or its adnexa, nor if the attempt gives rise to much pain.

Dr. B. claims for his method fuller and more certain information as to condition of the mucosa, and its canal, while at the same time it is less disagreeable to the patient.

The sound used in this way enables us to determine the extent upward to which the disease extends. By examining (first clearing the cervix of mucus) if we find the sound is stained by secretion, we know that catarrh of the body (as well as of cervix) exists. Hemorrhages can be determined in the same way. It is also to be noted that gentle movements of the sound do not cause hemorrhage if the mucous membrane is in a healthy state. Of course no examination should be made shortly before or after menstruation.

The cause and seat of a menorrhagia can be recognized in this way with certainty. Dr. B.'s method of employing intra-uterine treatment is as follows: Place patient on her back and the neck of the uterus is engaged in a tubular, or Sim's speculum, when it is seized with a slender long-stem tenaculum, inserted about ½ c. m. above this, as the uterus is then gently drawn down and the speculum removed and replaced by a shorter

one, slightly cut, the posterior limb being 9 c. m, and the anterior 7 c. m. In this way liquid applications can be made to the inner surface of the uterus, while it at the same time facilitates the use of the curette or other instruments. The use of the curette is chiefly confined to cases of menorrhagia or irregular hemorrhage which occur after labor or miscarriage. The curette removes any small portions of adherent decidua and favors the return of the uterus to its normal condition. The curette employed is generally a dull one, 4 m. m. broad and without previous dilatation of the canal. Before curetting a 5 per cent. solution of carbolic acid is poured into the speculum, and the curette passed into the canal through the fluid. Some of the fluid enters the uterus with each introduction of the curette, and causes the organ to contract. It causes no pain. In the treatment of chronic cervical or uterine catarrh, Dr. B. pours into the speculum a 10 per cent. solution of copper sulphate, and through this is passed into canal or cavity of the uterus a silver canula 4 to 6 m. m. thick, perforated at the sides and point, and moved slowly to and fro several times. Should the canula be too large for the canal, some slight hemorrhage may occur after the operation.

In cervical catarrh it is not always necessary to draw down the uterus. Any form of speculum may be used, but it must be borne in mind that the axis of the uterus must be brought into the axis of the cervix to allow of the introduction of the canula.

Correspondence.

OUR NEW YORK LETTER—THE POLYCLINIC AND THE POST GRADUATE SCHOOLS.

There are three ways open to a post-graduate medical student who wishes to add to his store of professional knowledge. He may, in the first place, matriculate at either or all of the principal medical schools, viz : the College of Physicians and Surgeons, Bellevue, or the University of New York. By so doing he can attend at the College of Physicians and Surgeons the lectures of such men as Prof. Francis Delafield and his very instructive Thursday medical clinic. On Fridays Prof. Thomas gives clinic on diseases of women, and he will then receive his due proportion of invitations to see the Professor's ovariotomies. He can attend Prof. Jacob's clinics on diseases of children. He will be invited to the operations of Drs. Sands, Wier and Bull, at the New York Hospital, and may attend any or all of the lectures of the college. At Bellevue a matriculation ticket only admits the holder to the clinics of that school. Perhaps the most interesting of these are Prof. Joneway's nervous clinic, and Prof. Flint's medical clinic. Prof. Key's operations for stone are well worth seeing, while the surgical clinics of Profs. Bryan and Dennis and Dr. McBurney are full of instruction. At the University Dr. Loomis is the chief attraction. These tickets also admit the holders to Blockwell's Island, to the venereal clinics. The tickets cost but five dollars each, which makes the plan a very economical one. In connection with this, or alone, private instruction can be procured at an expense of from ten to twenty dollars a month for each course of an hour or two a day, three days each week. Dr. Heitsman conducts a course on Histology and Pathology at his private school. This is a thorough course in every respect, as is also the course on the same subjects given by Dr. Pruden at the College of Physicians and Surgeons. A course on physical diagnosis, etc., in the wards of Bellevue hospital by Prof. Joneway is, and should be, much sought for. Dr. Putzel gives a course of instruction on nervous diseases in the out-door department of Bellevue also. Dr. A. A. Smith lectures on physical diagnosis at the same place ; and the courses on operative surgery, of Profs. Bryan and Dennis, are open to any one, whether he be connected or not with the school in which they hold honorable chairs. Dr. Mittendorf, who is connected with the Thirteenth Street Eye and Ear Infirmary, gives a course on ophthalmology and otology, which is very thorough, and embracing as it does such eminent instructors as Dr. Derby and Dr. Loring of ophthalmiscopic fame. Dr. Bosworth used to, and I believe still does, give a course on diseases of the nose and throat at the out-door department of Bellevue. These courses are all given by good men, and have their advantages and their disadvantages as I shall point out further on. The last and most popular system of post-graduate study is given at the recently organized schools, viz. : The Post Graduate School and the Polyclinic. The establishment of these schools mark the beginning of a new era in post-graduate study.

Everything else being equal, the benefit derived from a clinical lecture is in direct ratio to the number instructed. This is doubly true when applied to such studies as diseases of the eye, ear,

nose, throat, etc., where not only close inspection is necessary but instruments which aid the eye are required, and in those other departments of physical diagnosis where the training of the ear is of so much importance. It is also true in gynecology where the sense of touch must be educated. Of course at the regular undergraduate medical schools no such training is possible.

It is by the private courses that the personal teaching and the training of the senses are best accomplished, and but for one drawback this would be the ideal plan. But this drawback is a fatal one to the busy physician who wishes to "steal a while away from every cumbering care," and derive the greatest amount of benefit in the least possible time. The difficulty is this: every course which I have thus incidentally spoken of, with one exception, *is given at the same hour of the day*. The Post Graduate scholars, on the other hand, have, as far as possible, obviated this by thoroughly systematizing the different studies, so that every hour of the day, and, if desired, several hours of the night can be utilized. Between the Polyclinic and the Post Graduate it is very difficult even for one who has attended both to make a choice. The Polyclinic has the greater amount of clinical material, which is of course a great advantage. It also has the larger class of students, which is a disadvantage. The Polyclinic is a purely clinical school while the Post Graduate has a few didactic lectures. The anatomy and physiology of the nervous system are taught in a very thorough and learned manner by Prof. Spitzka, who is an authority on these subjects. Dr. Ronney delivers a very practical course of lectures on the applied anatomy of the nervous system, which consists, for the most part, of the localization of brain lesions and of lesions of the cord. These courses, taken in connection with the clinical lectures held by Prof. W. A. Hammond and Dr. Dana, make the course on nervous diseases at the Post Graduate a very desirable one. The course on diseases of children has very able exponents at the Post Graduate, but I think that Prof. Riply of the Polyclinic is a more practical instructor, inasmuch as he dwells more on the diseases which are encountered by every physician, while the instructors at the Post Graduate delight most in the diseases which we read about but rarely see.

The course on diseases of the eye and ear at the Post Graduate school cannot be excelled. Prof. Roosa is a teacher of rare ability, and his clinics at the Manhattan Eye and Ear Hospital will be remembered with feelings of pleasure by all who have participated in them. This I say without detracting anything from the same course in the Polyclinic.

It is at these schools that the student of Gynecology is led to exclaim:

> "This is the way I long have sought
> And mourned because I found it not."

By taking out the course of gynecology at both schools almost the entire day may be spent at the clinics of the most eminent men of the country and in attending the operations at the Women's Hospital and other hospitals. It is said that a poet must be born, not made, and it may also be said that a teacher must be born and not made. If ever a man was born a teacher Dr. Dawson, Prof. of Gynecology at the Post Graduate School is that man. Only five years ago little but didactic teaching was afforded to the majority of physicians, and to-day it is in this city one of the most thoroughly taught specialties in a clinical way with which we have to deal. Dr. Thomas, Dr. Emmet, Dr. Mundi, Dr. Hunter, Dr. Skein, and a host of lesser lights, are engaged at these schools as instructors, and there is no dearth of material with which to demonstrate every known disease. In future I may go more into detail on other branches.

W. P. S.

226 East 20th St., New York.
January, 1885.

Progress of Science.

AN ADDRESS IN OBSTETRICS AND GYNECOLOGY.

Delivered at the First Annual Meeting of the New York State Medical Association, November 19, 1884.

By T. Gaillard Thomas, M.D.,
Clinical Professor of Diseases of Women in the College of Physicians and Surgeons, New York.

Mr. President and Gentlemen—Fellows of the New York State Medical Association: If I interpret aright your wishes in requesting from me an address on obstetrics and gynecology on the occasion which brings you together in this city to-day, you desire, at the hands of one who has paid more attention to these subjects than the general reader and practitioner, an estimate from his standpoint of the present status of these departments of medicine, their relations to other branches, the advances which the past decade has

accomplished for them, and the most signal lines of progress which have been pursued in the accomplishment of such advancement. If my conception of your wishes is correct, my task will not prove a difficult one, nor shall I be forced to weary you with prolix and uninteresting details.

Pardon a passing reference to the infancy of the science of obstetrics, which will serve merely to remind you of facts which you know as well as I do. Obstetrics as an art must always have existed, even among savage nations, and as civilization and refinement have increased, this art has become ever more and more perfect, keeping pace, as other arts have done, with the general advance in a people's knowledge. And thus it is that obstetrics, advancing from the ages of the past, from the period of the wonderful old man of Cos to that of Smellie and Levret, existed as a very perfect art indeed. But it was in no wise a science. He who was to elevate it to this high sphere was found in the person of the great Englishman, William Hunter, whose admirable work upon the gravid uterus did for this department of medicine what the eminent labors of Euclid did for mathematics and which exists to-day as a valuable part of the library of every intelligent practitioner of midwifery.

From that time to the present a steady advance has been made, and in our day we see the reproach which once upon a time, and that not so very long ago, attached to the "man midwife" entirely wiped away.

But all this has often been written of: let me leap over the wide chasm which divides two centuries from each other and speak of those improvements in this hundred-year-old science to which the past decade has given birth.

With how little pomp and parade are the greatest discoveries of science usually heralded! Who could have pictured to himself the wonderful results which were to follow the crude experiments of Count Rumford with steam; the watching of the swaying of a set of church lamps by Galileo; Newton's study under the apple-tree; or the flying of a Yankee printer's kite upon Boston Common? Yet the world has trembled and swayed under the result of these things, and mankind has felt their influence in every fibre and atom! In my judgment, one of the greatest achievements of modern pathology has been the discovery of the agency of certain lowly-organized monads, micrococci, and microzymes, classed under the head of bacteria, in the production of septicæmia, pyæmia, and the long list of diseases which are their outcome. These atomic bodies, floating in the atmosphere, clinging to sponges and towels, and adhering to instruments and fingers, enter the blood through the open mouths of abraded surfaces. The prevention of the evil consequences of such entrance by the plans of Lister has accomplished a great deal for general surgery. Applied to obstetrics and gynecological surgery, the same methods are found to be fully as successful.

Progressive obstetricians are now pretty well agreed that the diseases which follow childbirth are due, for the most part, to the introduction of some contagium or poisonous element from without, through the open mouths of exposed bloodvessels laid bare by the parturient process, somewhere between the fundus uteri and the vulva. This theory once being accepted, it follows, as a natural deduction, that every means in the power of the obstetrician should be adopted for the prevention of the introduction of the morbific agents.

Even although the obstetricians of to-day are not prepared to make aseptic midwifery a rule wherever that art is practised, it is highly probable that in the very near future this position will be accepted. Even now this method, in modified form, is exerting a beneficial influence and steadily working its way to adoption, in spite of the fact that it entails a good deal of trouble on the practitioner. That it can do no harm is quite evident. Does any man, can any conscientious obstetrician, maintain that strict cleanliness and the most scrupulous avoidance, so far as it lies in his power, of all things which can possibly admit of the entrance of the agents which in all probability produce puerperal septicæmia, will do any harm in the lying-in chamber? Supposing that only one life is saved out of a hundred deliveries, will any one assert that the saving of this one life would not repay him for the trouble which his preventive precautions have cost him? If the whole theory of the bacterial origin of puerperal fever is false, then in a quarter of century from now all precautionary measures will disappear and the old *régime* will triumph. But if, perchance, this theory is valid and true, then no human power will prevent the realization of the prophecy that aseptic midwifery will be a rule as strict, as inviolable, and as obligatory as the aseptic surgery of amputations and of laparotomy is to-day. Look at the surgery of London, of Paris, of Vienna and of New York of twenty years ago, with its unclean hands, its fatally dirty instruments, its death-laden sponges, and its foul air, with its terrible mortality, and then look at the surgery of those same cities to-day; and he will be a bold man who dares gainsay the statement that in another quarter of a century no one will venture to rise in a scientific body and declare that any efforts at perfect cleanliness in the lying-in room are superfluous or absurd.

To free the parturient act from the dangers of septic poisoning, to prevent that scourge, the so-called puerperal fever, suppurative arthritis, pyæmia, embolism, and septic inflammation of the lung, liver, and other organs, would be to save millions of lives in every generation, and to raise the science of obstetrics to an enviable height.

The germ theory has done more for obstetric medicine than what I have here alluded to. It has revolutionized the treatment of that variety of septicæmia which has been called puerperal fever. No longer do we depend in the treatment of this affection upon quinine, opium, and the application of emollients over the abdomen. By intrauterine injections the cavity of the uterus is thoroughly and repeatedly washed out with solutions of the bichloride of mercury 1 to 2000, or with a two and a half per cent. solution of carbolic acid. Surely no one who has experience in the new and the old methods will cavil at my statement that a great improvement has been effected by the former.

Were I called upon to sum up the treatment of a *declared undoubted* case of puerperal septicæmia, marked by the usual symptoms of pulse of 120, temperature 105° or 106°, which would meet the requirements of our time, I should give it categorically thus:

1. Quiet all pain by morphia hypodermically.

2. Wash out the uterine cavity with antiseptics.

3. Lower the temperature at once below a hundred, not by the barbarous method of the cold bath, but by the far better one of the coil of running water.

4. Feed the patient upon milk and nothing else, unless some good reason exists for changing it.

5. Exclude from her room all except the nurse and doctor, keeping her as quiet as possible.

Although the subject of extra-uterine pregnancy has attracted attention from the earliest days of medicine, it is only of late years that it has been carefully studied, its diagonsis put upon a firm basis, and its treatment systematized. Laparotomy, with its wonderfully beneficent results, has been brought to bear upon these cases before and even after rupture of the vicarious fœtal nest. By this procedure Jessup, of England, has succeeded in delivering at full term a child developed in the peritoneal cavity and saving at the same time the mother; and by it Tait, of the same country, has saved four women after the fœtal sac has ruptured. But it is to the fœticide powers of the electric current, first used by Allen, of Philadelphia, and then by Landis and Reeve, that the safety of such cases can best be trusted. This method is harmless to the mother, even if an incorrect diagnosis be made, and effectual in producing fœtal death if the diagnosis be correct. The number of lives which have already been thus saved is quite large, and is daily increasing. And these are lives which in former times would have been sacrificed to inattention, or want of power in diagnosis, or a lack of reliable remedial measures, even if diagnosis were rendered pretty certain.

It must not be supposed that in the olden time no cases of extra-uterine pregnancy were saved. In making my statement I allude only to the systematic management of cases in their early periods, both as to diagnosis and treatment. In this country, even as early as 1759, Dr. John Bard successfully performed gastrotomy for the removal of a fully-grown child from the peritoneal cavity. Dr. Baynham did so twice—once in 1791 and again in 1799; and Dr. John King, of Edisto Island, South Carolina, in 1816, cut through the vagina at full term, applied the forceps through opening, and safely delivered a slave woman of a child which was developed in an abdominal pregnancy. But at that time, and long afterward—until our own times, I may say—the early diagnosis and early treatment of tubal pregnancy were found to be impossible. To-day, given a woman whose symptoms of pregnancy are irregular, who suffers pain in one iliac fossa, who has sudden gushes of blood and who is subject to occasional attacks of faintness, and every intelligent practitioner would at once examine with reference to the existence of ectopic gestation, and, discovering it, would promptly proceed to destroy the fœtus in its false uterus.

Some one has very pithily said of late that the medicine of a hundred years hence will consist chiefly of prophylaxis and surgery. It appears to me that the statement, which has more than one grain of truth in it, applies with great force to our subject of to-day. The day is, I feel sure, not far distant when preventive measures will be applied with a most triumphant result to placenta prævia, puerperal nephritis, placental apnœa, contracted pelvis, the obstinate, and often fatal, vomiting of pregnancy, and that extreme hydræmia which so often results in thrombosis.

Obstetricians are beginning to question themselves as to whether it is wiser, in the interests of both child and mother, to wait and watch during the last two months of pregnancy until a sudden and furious hemorrhage makes an issue unavoidable in placenta prævia, a convulsion announces the point of tolerance in puerperal uræmia, or the cessation of fœtal movement tells the tale that the crippled intra-uterine lung has ceased to have power enough to prolong fœtal life. The methods of inducing premature labor are now so simple, so certain, and so void of danger that they, more than at any previous time, present themselves as a sovereign resource in such cases.

And this is more especially true since Tarnier, by his glass-house with heated air, regulated so as to meet the feeble heat-making process of the premature infant, renders the perpetuation of the lives of these beings so much more certain than when they were exposed to the chilling draughts of the chamber, and perhaps were at once dipped in water and exhausted by washing and dressing.

How often has every man in this room watched

with intense interest and anxiety the following picture! A mother of several children, a beloved wife, and the centre of a large circle dependent upon her for love, for care, and for counsel, about the end of the seventh month develops the symptoms of placenta prævia, or severe puerperal nephritis. The physician cannot conceal from those who surround her the fact that the violent hemorrhage or sudden convulsive seizure may at any moment destroy life. Should one of these occurrences take place, the patient's friends know full well that it may be hours before medical aid can be obtained in their dire necessity. Day after day the painful process of watching, hoping, dosing goes on; and gradually the symptoms grow worse until the final issue comes, and great joy is felt if, the child being sacrificed, the mother survives. It is to save all this, at the expense only of exposing the child to the danger of premature birth —a child, too, whose life would be at great hazard even if the pregnancy were allowed to proceed—that premature labor offers itself as a valuable resource.

The obstetric forceps is probably the most life-saving instrument which surgery has ever invented; and from the time of the Chamberlens, about 1647, thousands in every generation have endeavored to improve it, thousands have handed down their names in connection with it by suggesting trivial modifications, and thousands have in their efforts rendered themselves butts for the laughter of their successors by reason of the vanity which guided them. Few, very few, real improvements have been made in these instruments, and these improvements have occurred at long intervals. The Chamberlens used short, straight forceps; Levret and Smellie added length, and gave a pelvic curve to these, and nearly, if not quite, doubled their value; and Tarnier, of France, has, in our day, added a pair of tractors which enable the operator to pull more accurately in coincidence with the superior strait, while the handles are still in the inferior. This is the only real improvement in these instruments since the days of Levret and Smellie, and, like theirs it marks an era in the history of the instrument, and a mile-stone in its advancing usefulness. There, are cases, many cases, in which it is not called for; there are some, and not a few, in which it gives great facility in delivery

Of late two substitutes have been proposed for the Cæsarean section—extirpation of the gravid uterus and its annexa after delivery of the child from it, or Porro's operation; and delivery of the child above the superior strait of the pelvis by cutting through the abdominal walls and vagina, or laparo-elytrotomy.

R. P. Harris, the only great medical statistician that America has yet produced, reports in October, 1883, that the combined Porro and Porro-Muller operations saved, out of 116 cases, $48\frac{8}{29}$ per cent. of mothers. and 90 out of 118 children. Garrigues, in an able and exhaustive essay, reports in the same year that, out of eight operations, laparo-elytrotomy saved half of the mothers and all of the children except two, who died before the operation was undertaken.

In general terms, I think that, to state the comparative success of the two operations, it must be said that the results of laparo-elytrotomy have thus far been superior to those of the Porro-Muller operation, but that for some inexplicable reason the latter has found favor with the profession, both in this country and in Europe, which the former has failed to obtain.

From my experience with laparo-elytrotomy, I feel certain that, if a fair trial is given to it, it will surely yield a success greater than either the Cæsarean section or the Porro-Muller operation. It is so easy of performance, inflicts so little injury upon important viscera and has already proved so successful, that I cannot doubt its merits.

We must not conclude that, because the general professional mind is not favorable to an operation which has been little tried, such an operation has "been weighed in the balance and found wan ing."

The following examples will prove the contrary: In 1834, Gossett, of London, discovered the present operation for vesico-vaginal fistula—position, metal suture, speculum, and all—operated twice, and published his operations. Yet it was left for Marion Sims, in 1852, to re-discover the whole matter.

The greatest advance which has been made in medicine during the present century is the application of clinical thermometry, and its adoption is,as you all know, quite recent. Yet, about one hundred years ago, Currie, of England, fully developed this invaluable contribution to scientific medicine merely to see it pass out of notice and yield no results. And these are by no means the only instances of want of appreciation which can be quoted. I do not, therefore, despair of laparo-elytrotomy, but, from my personal knowledge of its advantages, am very hopeful of its future. A little over a month ago Dr. Pilcher, of Brooklyn, having under his charge a case of labor in a deformed woman, aged twenty-one years, in good health, but with a rachitic pelvis, giving in its antero-posterior diameter of the superior strait a measurement of two inches, sent for Dr. Skene, to aid him. After she had been in labor eight hours, Dr. Skene, with his well-known skill, performed laparo-elytrotomy and delivered her of a living child. To-day both mother and child are perfectly well, the after-history of the former being entirely uneventful, the wound healing by first intention, and the patient sitting up on the twenty-first day. It gives me great pleasure to avail myself of Dr. Pilcher's kind permission to report this, as yet unpublished, case to you to-day. And now, in all candor, let me ask you if a procedure which has effected such a result repeatedly, both as regards mother and child, should not be at least fairly tried before it is cast aside among the failures of obstetric surgery.

From the earliest records of medicine in Egypt,

of Greece, and of Rome, the practice of gynecology can be readily traced, and although, like all other learning, it became paralyzed by the baneful influence of the dark ages, it was upon the revival of letters at once pursued. Before the middle of the present century, however, it did not in any respect deserve the name of a science. About that time, through two influences—the speculum, which since the days of Récamier had slowly worked its way into use, and anæsthesia, which enable the surgeon to perform operations, both tedious and painful, upon the genital organs—the science of gynecology passed in great degree out of the domain of medicine, with its uncertain theories and doubtful resources, into that of surgery. And from that day a new era has existed for this department of medicine which has given it a place among other, not only of respectability, but of dignity. I know not what view others may take as to the influence which has had so great a result upon gynecology, as all have seen exerted during the past quarter of a century, but, in my judgment, it is the bringing into the service of the department the powerful aid of surgery. Let me beg you to observe that I am not urging the claims of surgery at the expense of those of constitutional treatment in gynecology. Far from doing this, I am a strong advocate for the great advantage of constitutional treatment in diseases of the pelvic viscera of the female. There is no more clashing between medicine and surgery here than there is elsewhere; they should work together for good, the one sustaining and supplementing the other. Nevertheless, I fearlessly assume the position that an enlightened, conservative surgery is the pivot around which is to revolve the gynecology of the future, and that, were surgery withdrawn from this department to-day, it would be emasculated of the greatest part of its usefulness and efficiency, and would gradually lapse into the condition which it occupied half a century ago.

Every virtue has a vice which so closely corresponds to it, and so nearly resembles it upon superficial examination, that the real and the false are often confounded. Vanity often simulates modesty; cold policy passes current for charity; even arrogant pride is not rarely mistaken for humility. In medicine, cant, for there is cant in medicine as there is in religion, in politics, and in all other spheres in which the mind of man works, is often mistaken for that most laudable and meritorious of medical qualities, conservatism.

When vaccination was introduced, a great deal of medical cant was talked: and so when the pains of labor were first assuaged by chloroform; when ovarian tumors were submitted to laparotomy, and thousands of valuable lives were yearly saved; and so, also, when the obstetric forceps was put upon its proper basis as an instrument to be resorted to in the interest of mother and child before the symptoms of powerless labor had absolutely developed themselves. When, through the instrumentality of Simpson, Sims, and Simon, surgery was introduced into gynecology, a jeremiade was inaugurated, the echoes of which are only now dying away like the grumblings of a recent storm. Those who practised gynecological surgery were accused of recklessly mutilating the most beautiful of God's creation. Their conservatism was impeached, their judgment was impugned, their honesty was attacked. And what has been the outcome of the controversy? What is the present status of the moot question? By the aid of gynecological surgery, thousands of women, who formerly filled beds of suffering throughout their menstrual lives, are now in a month or two restored to perfect health; thousands who were doomed to early death are saved; thousands who for weary years visited the offices of one, and then another, and still another physician, resisting the powers of general tonics, and nitrate of silver, and potassa fusa, and the actual cautery, are now quickly enabled to perform all the duties of life without exhausting their resources by yearly stipends to the medical man. A woman suffers from profuse leucorrhœa, and backache, and difficult locomotion. Formerly she would have gone, times without number, to her doctor's office to have caustics applied to the ulcer of the neck of the womb, until he got tired of her or she of him. Now a lacerated cervix is cured by Emmet's great operation, and limit is put to her patience and her husband's capacity to bear expense. A young woman, whose terrible sufferings at menstrual periods have half crazed her, made her nearly an opium-eater or gin-drinker, and almost transformed her into one of those social vampires who suck the sympathies and vital force of a whole family in place of blood, instead of living on, a libel upon her sex, is cured by Battey's operation and restored to her place in life. Another, who has had the accident of lacerated perineum inflicted upon her by parturition, instead of passing her life in "ringing the changes" upon all the varieties of pessaries known to art, is cured by perineorrhaphy or colporrhaphy. And still another who, perchance, for twelve years has had an issue of blood, and who has suffered many things of many physicians, and has spent all that she had and was nothing bettered, but rather grown worse, after having exhausted all the hæmostatics and oxytocics and astringents, has a loop of wire, called a curette, carried into the uterine cavity, and fifteen or twenty fungoid growths, about as large as grains of barley, removed, and straightway the fountain of her blood is dried up.

Surely the time is at hand when the gynecological surgeon may boldly say to his detractors, "enough of this, the logic of events condemns your futile efforts," and to those in his own department, "he who is not prepared to give his patients the advantages of surgery, either at his own hands or those of another, is not prepared to act honestly and fairly by those who intrust their interests to his keeping."

The pathological conditions which most frequent-

ly result in that chain of symptoms which mark the pelvic diseases of women may, I think, be fairly tabulated in the following manner:

1. Injuries received during parturition.

2. Natural or acquired imperfections of the uterus and ovaries.

3. Displacements of the uterus.

4. Benign neoplasms in the uterus, ovaries or annexa.

5. Tubal and ovarian diseases.

6. Uterine catarrh.

7. Hyperplastic development of the endometrium.

8. Neuroses, such as vaginismus.

9. Inflammatory disease of the pelvic areolar tissue and peritoneum.

10. Malignant disease of the uterus or ovaries.

It may safely be said that in almost all of these a resort to surgical interference is often an essential to cure, while in most of them it is absolutely so.

No surgical procedure has more profoundly excited the interest of gynecologists during the last decade, and I may add that none has done more good, than the operation of trachelorrhaphy. That its future sphere of usefulness is a large and brilliant one, no one who has studied its results without prejudice, at the bedside, can for a moment doubt. May its originator long live to enjoy the evidence of the good which his labors have accomplished, and will continue for all time to effect.

Extirpation of the ovaries for three purposes; 1. For effecting a premature menopause; 2. For checking the growth of large fibroids; 3 For removal of ovaries and Fallopian tubes for hydro- and pyo-salpinx, and resulting pelvic inflammation —has now become a well-recognized and accepted resource in gynecology. The originators of these operations, for they really differ from each other in many essential respects, are Battey, Hegar and Tait. So great are the benefits resulting from these procedures in the various conditions for which they are practised that nothing can now stop their advance.

Nevertheless, as I look to-day into the future of any operation for removal of the ovaries, I see it the instrument of great abuse; I see it performed in numerous cases of mental disorder aggravated by the menstrual molimen in which it will fail of result; in many of uterine disease which could without its aid have been cured by care, patience and skill; and in a great many cases in which diagnosis is obscure, and in which a resort to it is, to say the least, empirical. But I see opening before it, in the future, also a wide, very wide field of usefulness; I see cases of women, doomed not only to misery themselves, but dooming whole families to life-long discomfort and anxiety, entirely relieved by it; and I see many instances in which, without it the curses of opium-eating and dipsomania which frequently ingraft themselves upon the monthly recurring dysmenorrhœa, lifted by it from moral death to lives of happiness. Are we to reject agents capable of great good because by misdirection they are likewise capable of great evil? No; let us hail the good and apply it to man's wants, and let us strive as best we may to limit and control the evil which we cannot wholly avoid. No one can doubt that numberless evils have attended upon the discovery of gunpowder, yet no one can be blind to the fact that that discovery has done a vast deal for advancement of civilization and the best good of mankind.

Even as early as the year 1560 Andreas à Cruce is said to have removed the uterus *per vaginam* for carcinoma uteri, and it is probable that even before his time Soranus had performed this desperate operation, which taxes in our day the skill, boldness, and resources of the surgeon. During the eighteenth century the operation was several times performed, and in 1813 Langenbeck had a successful case. In 1829 Recamier made improvements in it, and in 1878 Czerney revived the operation and placed it upon a firm basis. In 1883 Langier published the following statistics of the procedure:

Vaginal extirpation of cancerous uterus.....	133
Recoveries,.....	95
Deaths,.....	38
The percentage of deaths being,.....	28

In 1884 P. F. Mundé published statistics of 256 cases, with a mortality of $24\frac{8}{9}$ per cent.

Freund, in 1878, revived the operation of the removal of the uterus by abdominal section, a procedure put in practice by Gutberlat as early as 1825. Freund's operation has now been performed 106 times, with a result of 72 deaths and 34 recoveries.

Not to detain you longer upon the present status of these two heroic procedures for desperate conditions, I would sum up the matter by the statement that Freund's operation, by reason of the great difficulties and dangers which attend its accomplishment, is now relegated to disuse; while vaginal extirpation of the uterus, although acknowledged to be a procedure of great danger, of undoubted difficulties, and of questionable results, has conquered for itself the position of a recognized, legitimate, and even valuable procedure.

An operation which ends fatally in one-quarter of all the cases submitted to it is a procedure of questionable character, of course; but let him who feels disposed to question the justice of the estimate here given remember the terrible future which inevitably attends upon the progress of uterine cancer—the physical suffering, the mental distress, the disgusting concomitant circumstances—and he must admit that any operation which has the power, even at the imminent risk of death, to lessen or remove these, should be hailed as a precious resource!

Uterine extirpation for cancer, however, is one of the most difficult and dangerous of the resources of surgery. As a compromise measure, removal

of the entire neck by a conical section extending even up to the fundus uteri, and subsequent closure of the cervical lips by suture, often supersedes it with great advantage.

Deformities of the uterus which alter its shape, impair its nutrition, and interfere with the perviousness of its canal, have long been recognized as grave pathological factors; and even in our day the most sanguine practitioner must admit that their treatment is difficult, uncertain, attended by the dangers of cellulitis and peritonitis, and unsatisfactory to a lamentable degree.

At the present day there are three methods by which uterine deformities—anteflexion, retroflexion, and lateroflexion—are treated: First, the misshappen organ is repeatedly forced into better form by the introduction of the uterine sound, and subsequently it is in a lame, uncertain fashion sustained by a vaginal pessary; second, the tortuous cervical canal is cut at the internal and external os, and a uterine stem is introduced and kept in place by a sustaining vaginal cup; and, third, the whole uterine canal is at one sitting distended by a powerful "divulsor," or expanding forceps, to as great an extent as the tissue of the organ will bear. The first two of these methods are well known to you; it is the last I would now bring to your notice.

The heroic nature of this operation, its apparent brutality, and the dangers which one would naturally fear as a consequence of the forcible stretching of uterine tissue, which is really equivalent to absolute tearing of it, has retarded its advance to the position of an accepted operation. Its introducers and chief endorsers have been Priestly, Borck, Ball, and Ellinger, all of whom have claimed for it not only excellent results in cases of uterine deformity, but also a very marked immunity from the accidents which one would fear from it. In this city Dr. W. Gill Wylie has reported very favorably of it and Prof. Goodell, of Philadelphia, has recently published a paper upon it which, with the strong endorsement of his name, will go far toward rendering it popular, and exciting others to a fairer trial of it than it has yet received. Personally I have no experience of it worth reporting, but I certainly feel it a duty to test the question of its use fully from the evidence which we now have before us.

In connection with my subject I would mention four drugs which have of late been introduced into practice, all of which appear to me to possess sufficient value to warrant their special mention here. These are the permanganate of potash, and the fluid extracts of the stigmata and ustilago maidis of the *Viscum album*, of the *Viburnum opulus* and *Viburnum prunifolium*.

Permanganate of potash, introduced by Sydney Ringer, of London, as an excitant of the menstrual flow, is, I think, the best emmenagogue which has yet been discovered. The stigmata and ustilago maidis, or ergot of corn, are, like the fluid extract of *Viscum album*, or mistletoe, excellent oxytocic agents, and replace the ordinary secale cornutum very well, not only during labor, but in causing uterine contraction for the relief of metrorrhagia, uterine fibroids, subinvolution, etc.

The medicinal virtues of the *Viburnum opulus* and *Viburnum prunifolium* appear to consist in an influence of sedative character upon the utero-ovarian nerves. These drugs have been greatly lauded as preventives of threatened abortion, and remedies for the pains which attend disordered menstruation. Although in my experience they have fallen far short of the excellence which has been claimed for them, I feel sure that they possess a considerable degree of virtue.

Although the prolific theme which you have allotted to me, Fellows of the Association, would readily afford me material for a much longer address, the fear of taxing your patience admonishes me of the propriety of bringing my remarks to a close. In doing so, let me beg of you to accept my thanks for the kind attention which you have accorded me—an attention which has given zest to my efforts and rendered my task a pleasure instead of a labor.

DYSPEPTIC NEURASTHENIA.

The following is the substance of the remarks made on the above subject by Dr. Ewald at the third Medical Congress (at Berlin), and reported in the *Berliner Klin Wochenschrift*.

Our intention should not be confirmed to the stomach, but should be directed with at least equal interest to the intestinal tract. In none of the patients suffering from the complex of symptoms embraced by the terms "dyspeptic neurasthenia" (or neurasthenic dyspepsia), were intestinal troubles absent. These latter are not always severe, and there may be merely constipation or diarrhea, or insufficient absorption. But they may become very prominent, so as almost to constitute a seperate class, as Cherchevsky has lately shown (*Revue de Médecin*, 1884, No. 3). There is severe abdominal pain, and the abdomen is not retracted, but distended by gases (flatulent dyspepsia). The general nervous symptoms are usually more severe than in the purely gastric form. Thus in this dyspepsia both stomach and intestinal tract are together affected, but usually not in an equal degree.

The term "asthenia," introduced by Brown and adopted by Brussais, indicates a condition of weakness of an organ, which is shown at first by morbid irritability, and afterwards by lowering of its functions. Thus the term "dyspeptic neurasthenia" is better than "nervous dyspepsia," because the dyspepsia is then made a part of the general affection of the nervous system; but the latter expression is more popular.

The symptoms, of which none is special to the disease, but each of which may also occur when organic alterations are present, are mainly the

following: a coated tongue, bad taste, dryness of mouth or else increase of saliva, foul breath, eructations, pyrosis, want of appetite, repugnance to food, ready satisfaction after ravenous hunger, inflation of the stomach by gases, restlessness (Kussmaul), meteorismus, etc.

Burkart has drawn attention to the fact that strong pressure in these cases in the situation of the great abdominal plexuses causes sharp pain; and he considers such spots analogous to the "tender spots" of hysteria, inasmuch as these particular pains are only evoked by pressure, and are not to be confounded with subjective gastralgic pains. The author confirms this to some extent, but the symptom may be absent. Rosenthal mentions painful spots also along the spinal column, but these are still less constant.

Great weight has been laid on the general nervous symptoms, which may be hereditary or not, and are often very prominent. The intestinal neurosis is nearly always preceded by general (nervous) prodromata, which may also accompany it. Such are headache, toothache, weariness, a disposition to look on the dark aspect of things, an unnecessary gloominess, a saddened character of voice, etc. Weakness of memory, and inability to think collectively may go on to vertigo at times. The pulse is small and frequent, the hands and feet cold, and palpitation and dyspnœa accompany exertion. These latter symptoms may give rise to the greatest agony, as if death were impending, till eructations alter the scene.

All these symptoms are here purely nervous, and do not rest on palpably central nervous lesions, like the gastric crises of tabes dorsalis, or the gastric symptoms of diffused and localized cerebral lesions, or those occurring in chlorosis, menstrual derangements, uterine or ovarian troubles, severe psychic excitation, as "nervous diarhœa" or constipation. All these differ from mild gastric neurasthenia in their severity and sudden development. Richter and Leyden have enlarged on such cases.

Prof. Leube is inclined to regard so-called "nervous dyspepsia" as a local disease of the stomach, but none of the chief recent writers on the subject think so. The dyspepsia is a symptom, and not a disease; no pathological changes in the stomach have occured, in the ordinary sense of the term. Goltz has shown how slight irritation, normally without any effect, may cause severe gastric symptoms, in spinal and cerebral lesions.

The diagnosis is not always apparent. The long course of the disease, its original manifestations, the failure of local treatment, and the recognition of other neurasthenic symptoms, are its chief elements. The pains are less localized in character and less connected with food, than in organic disease. Vomiting seldom occurs. The stools vary in character, and the author has not remarked the ribbon-like character of the fœces so much dwelt upon by Cherchevsky.

Leube gives the "digestive experiment" as an aid in the differential diagnosis. This simply means that the stomach is empty seven hours after a meal, in health or in gastric neurasthenia, as tested by washing out. This is correct in the main but too absolute.

Leube further states that 50 cubic centimetres of a 3 per cent. solution of caustic soda, injected into an empty stomach, are completely neutralized in twelve minutes, in health. This quantity contains then 3 grammes of soda (46.3 grains), and would require about 15.4 grains of hydrochloric acid. Assuming gastric juice to contain 2 parts of acid per 1,000, we should have to suppose that 25 cubic centimetres (more than 8 ozs.) of gastric juice were secreted in twelve minutes to neutralize only the half of this. Such a quantity is out of the question, and we can only suppose of the fluids of the stomach be found neutral after the time given that much of the alkali has been absorbed or has passed into the intestine. This, of course, destroys the value of the experiment. The stomach pump should not be used when there is any suspicion of gastric ulcer. Violent peristaltic movements might cause perforation, apart from mechanical injury. Long observation is sometimes necessary to establish the diagnosis.

The prognosis and treatment follow of themselves. The former is uncertain, as in all neurasthenic affections. The milder cases are often the most obstinate, and *vice versa*, but in the mildest cases the affection lasts for months at the very least. The treatment must be general, all local medication is idle to the purpose. The nervous system must be strengthened and calmed. The mind and body must be occupied, and both must be fed. Gymnastic movements or abundant exercise, and hydro-therapeutic measures, are valuable. The diet should be simple and sufficient. Trousseau said that the best *régime*, and the only one suitable, was that which the patient from his own experience could support best. It should, however, be unirritating. Sedatives are useful, especially potassium bromide in large doses and, as tonics, quinine and arsenic, especially the latter. The English give belladonna in large doses 0·05 to 0.1 gramme (¾ grain to 1½ grains), even up to 7·7 grains in a day, to overcome obstinate constipation depending on spasmodic contraction of the intestinal muscular fibres. Small doses should always be given first, to ascertain how the patient bears the drug. There are two drugs of especial efficacy, chloral in gastric hyperæsthesia, and opium when the irritation is chiefly intestinal. The former has a slightly antifermentative action, besides its sedative influence and opium act not only on the distension and flatulence, but often in an aperient manner also. "Wind" is a potent cause of distress, and the constipation is often due to an obstinate contraction of the intestinal muscles. This latter is often easily overcome by opium, together with some mild vegetable aperient, such as rhubarb, castor oil, or tamarinds. Salines are to be altogether

deprecated. They only irritate the intestine and increase the discomfort, and thus a vicious circle is set up.

HEADACHES.

Dr. J. W. Given, of Salem, Oregon, in the neatly-issued Proceedings of the Eleventh Annual Meeting of the Oregon State Medical Society, 1884, gives a resumé of what is known concerning some forms of headache that are well worth repetition.

He first speaks of *hyperæmic headache*. Adopting the view that the quantity of blood in the brain varies, he asserts that the increase or decrease in the quantity of cerebral blood may extend beyond physiological limits, and result in headache. He assumes the debatable position that the activity of an organ increases with its blood supply. Hence "the obvious indication is to lessen the amount of brain-work." "Excessive worry" will generally be found to constitute a more important causative element of hyperæmic headache than "excessive over-work." He thinks such "worries" and their occasions should be honestly stated, the trouble thus removed, quiet of mind restored, and thus relieve over-tension of the cerebral blood vessels and thus quiet also the "brain cells," which have been over-excited and too long overstrained. "If the cause of worry is one that will grow less with time, the headache may be relieved for the time being by bromide of potassium. "Compressing the carotids will also diminish the amount of blood in the head. Plenty of sleep must be secured. Hot foot baths should be used to divert the blood from the brain. Brisk cathartics often have good effect. Blisters to the back of the neck are sometimes helpful. If the headache is due to systemic plethora, the lancet should be resorted to. General exercise is good. If hypertrophy of the heart is the cause, tincture of aconite and of veratrum to lessen the heart's action and arterial tension should be prescribed. Belladonna plasters over the heart sometimes quiet its turbulent action. In cases of cerebral hyperæmia, due to worry and over-work of the brain, systemic anæmia often exists. Then chalybeate tonics are especially called for; but as a rule they should not be administered alone. Hyperæsthesia of the brain cells is probably best relieved by potassium bromide. But this agent "usually impairs digestion, and, if continued in large doses, will lessen the normal activity of the brain." Dispense with it, therefore, as soon as possible. When the blood-vessels have been so overtaxed as to greatly impair their elasticity, and hence are passively filled with blood, the patient will experience headache by over-turgescence when he lies down—by the law of gravitation, in short. When such a condition occurs, elevate the head by pillows, lie with the arms extended above the head, compress the carotids, and, in some cases, arrange for the party to sleep in a sitting posture. Brain work must be reduced to the minimum. Fluid extract of ergot, in commanding doses ought to be given, with a view of keeping the blood-vessels contracted. The "common cold headache," "probably due to hyperæmia of the brain and a general toxæmia of waste products remaining in the blood, will usually be relieved by hot-air baths, with very small doses of tartar emetic" with stimulants, as ammonia, quinia in large doses and alcoholic drinks, accompanied by mild laxatives. [it is not thought in this community, that "quinia in *large* doses," is a stimulant.]

In anæmic headache, improve and increase the amount of blood in the head. Give good food and drink, plenty of exercise, and rest and sleep must be insisted on. No medicine can properly take the place of these means. Such patients flourish upon the same principles which a thrifty man applies to his horse. As medicines, iron and quinia, are the "stand-bys." Iron preparations least trouble the stomach when given two or three hours after meals. Fowler's solution of arsenious acid and cod-liver oil are useful—the latter especially in the anæmic headaches of children. If a weak heart exists, the recumbent position will [sometimes] do the double work of supplying the brain with blood and diminishing the heart's action. Digitalis also tends to make a weak heart strong by slowing its beats, thus affording it more time to take in blood. The anæmic headache which follows great loss of blood is often temporarily relieved by wrapping very hot cloths around the head. Alcoholic stimulants will also often afford temporary relief. Of course all abnormal drains should be corrected. In short, each pathological lesion causing anæmia should receive special attention.

Toxæmic headache. Dr. Give sums up as among the causes, such constitutional troubles as "syphilis, specific fevers, retained biliary secretions and excretions, kidney and skin excretions, rheumatism, lithiasis, and possibly that mysterious something called malaria." When these are the causes of pain, protect the nerves against irritants by opiates which also relieve pain. To avoid their constipating effects, combine it with belladonna or atropia, as best suits the case. Of course use mercury and iodides to cure syphilis. In cases of specific fevers, protect the nervous system against the poison [If a specific or other remedy is known that will do so],and also against excessive temperature. Cold sponging will relieve the temperature. "Time alone will exhaust the poisons." Bilious headaches are relieved by calomel and jalap. Chlorids of ammonium is also useful. Nux vomica and strychnia salts, according to the manner proposed for administration, protects the nervous system, in general, against the depressing effects of retained biliary secretions. [whatever authors, of an "experimental" turn of mind may say to the contrary, mercury *does* relieve, if any medicine does do so, biliary congestions, "engorgements" or whatever is the condition that practitioners of medicine recognize and call by the common name

of "biliousness."] Change the food and habits so as to bring the patient back to health. If excessive nitrogenous food is used change the diet. Cathartics may give temporary relief but they do not change the habit. Constipation of the bowels is a common cause. If he will not adapt his diet to his condition, he must have occasional purgatives. [Fluid extract of cascara sagrada is a remedy worth trying in ordinary cases of constipation that causes headache. We know of many that get on well under its empirical use.] In headaches due to renal secretions, opium renders the system partially tolerant of the presence of poisons. Eliminatives, such as diuretics, cathartics, etc., should be used. The salts of lithium are also serviceable. Hot baths should be used, a free action of the skin ought also to be promoted by clothing, etc. For the rheumatic headache, he advises the free use of alkalies and salicylate of sodium, with opium for the immediate relief of pain. Colchicum is demanded in cases of "gouty headache." Malarial headache is relieved by quinia, Fowler's solution and tonics. All depressing influences must be avoided. The headache of lithiasis is generally relieved by the use of alkalies and laxatives, with a diet chiefly of vegetables and fruit. Sick headache is probably due to an accumulation of waste products in the blood. In such cases, a thorough emetic will not do harm, and, in many cases, will afford relief. A good cleaning out with improved compound cathartic pills or another good cathartic, will usually shorten the attack. Let the patient abstain from all active exercise. Among the prophylactic agents used for sick headache are oxide of zinc, arsenic, iodide of potassium, etc. Let experience teach the patient as to the articles of diet and drink to be used, and as to the suitable forms and times of exercise.

Structural Headaches.—[Inflammations, neuralgia, tumors, tubercles, gummata, etc., are among the lesions that cause this form of headache. *Inflammations* of the membranes require active cathartics, and also such remedies as potassium bromide, chloral-hydrate, large doses of fluid extract of ergot and cold to the head with the ice-cap. Absolute rest, with the exclusion of all irritants of the sensorium, must be obtained. *Neuralgia* requires quinine, iron, Fowler's solution, morphia, and atropia for speedy relief. Of course, these empirical directions are to be used only after excluding local lesions. *Tumors* may be suspected if there be persistent headache, accompanied by a "choked disk" and vomiting. The resultant headache may sometimes yield to large doses of potassium iodide. Opium relieves the pain. Syphilitic gummata are generally removed by overwhelming doses of potassium iodide—200 or 300 grains daily. Nothing is curative in *tubercular headache.* Opium affords temporary ease.

Dynamical Headache.—Let the patient learn to practice hygiene, and live according to his strength. Let him sleep as much as possible, never engage in anything that will greatly tax his vital powers, and lead a quiet easy life. The best medicines are hyoscyamus with camphor, valerianate of ammonia—using opiates if necessary. Weak galvanic currents passed through the head will sometimes improve the nutrition of the nerves.

Reflex Headaches.—Potassium bromide is the best agent to relieve the pain of a reflex irritation. Among the frequent causes of reflex headache which must be inquired into and treated, are defective teeth, eye troubles, nasal catharrh, ear diseases, dyspepsia, ovarian and uterine diseases, urethral and vesical irritation, etc. The headache of teething children is best relieved by potassium bromide, and the several other conditions named should be appropriately treated.

THE TREATMENT OF BRIGHT'S DISEASE.

Dr. James Tyson is one of our highest authorities on all diseases of the urinary organs, hence it is important that we should be acquainted with his treatment of Bright's disease. In the course of a lecture published in the *Boston M. and S. Jour.*, August 28, 1884, he thus gives it to us:

"Next, as to *treatment.* Many cases of acute Bright's disease, if recognized early, require no treatment but rest in bed and an easily assimilable diet, of which the best form is milk. Although this is true, it does not do to leave these patients unwatched, for the course of the disease is uncertain; and, as a rule, you will not rest satisfied with this treament, although what more is done will depend to a great degree upon the urgency of the symptoms. We wish to keep the kidneys acting in order to prevent the retension of urea in the blood and the consequent danger to life which arises from this accumulation. After instituting the general treatment which I have suggested, I see that the bowels are opened, for neither digitalis nor any other diuretic will act as long as the bowels are constipated. If there is costiveness, some saline laxative, as magnesia or the citrate of magnesia, or some of the natural aperient waters, should be given. After the bowels have been opened, digitalis may be given either in the form of the tincture or infusion, giving fifteen drops of the former or a dessertspoonful of the latter, every three or four hours. If this does not produce the desired effect, I should not increase the dose of digitalis, for it is liable to derange the stomach, but I should associate with it one of the vegetable alkalies, as the acetate or the citrate of potassium.

"When admitted, this man was given one-tenth of a grain of elaterium to act upon the bowels, and afterwards received fifteen grains of acetate of potassium, a teaspoonful of the infusion of digitalis every three hours, making four or five doses in the course of the day. Under this treatment he did very well, and the œdema rapidly disappeared.

"If the treatment which I have suggested does

not produce satisfactory results, and the symptoms grow worse, I sometimes use cups over the loins, relieving the renal arteries through the lumbar arteries, by the anastomosis which exists between them. After the cupping, I usually apply a corn meal or flax-seed-meal poultice, the surface of which has been sprinkled with mustard. This keeps up a permanent counter-irritation, and it often starts the secretion of urine.

"If these measures fail, free action by the skin should be promoted. This is best accomplished by jaborandi, and in this case it became necessary to administer this remedy. As I have said, the patient at first did well on the use of digitalis and the acetate of potassium, but day before yesterday the resident physician found him delirious and acting in a very singular manner. On investigation it was found that although the urine was not actually suppressed he was passing a very small amount. We at once concluded that his symptoms were uræmic, and due to the retention of urea and its allies. The complication is frequently met with: a patient will be doing well, when suddenly there will appear coma, convulsions, or delirium, as we had in this patient. In addition to delirium, the man had slight convulsive seizures. We at once proceded to treat him as we usually treat such cases in the hospital. An infusion of two drachms of jaborandi leaves in four ounces of water was made, and the whole quantity given by enema. We often make the infusion with only one drachm of jaborandi, but as the symptoms were urgent, a double quantity was used. This did not produce perspiration, and in an hour the injection was repeated. In a short time he sweat profusely. He was also given one drop of croton oil, which acted promptly. The next morning all the symptoms had disappeared and the man was entirely rational. We are not always so successful in removing the uræmic symptoms, but frequently the result is all that could be desired. In this case the dropsy was also greatly relieved by the sweating.

"The above well illustrates the usual course which is to be pursued in cases of acute Bright's disease. If the disease is promptly recognized and properly treated from the beginning, the patient generally gets well; but if overlooked, as it often is, the opportune moment may be lost, never to be regained. Perhaps no disease demands for its prompt recognition and treatment a broader and more thorough medical education.

"There are modifications of the treatment I have described which are demanded by circumstances. In private practice, instead of giving jaborandi I should use the alkaloid, pilocarpin, giving the nitrate or muriate subcutaneously. The dose is from one-fourth to one-half a grain, as the urgency of the symptoms may demand. My usual custom is to give one fourth or one-third of a grain, and if sweating does not come on within half an hour, I repeat the dose. Jaborandi not only produces sweating, but it also increases the secretion of saliva, and may induce purging. It is also a diuretic. We have in this remedy a most valuable addition to the therapeutics of Bright's disease. In order to keep up the diaphoretic action, pilocarpin may be continued in doses of one tenth of a grain. This is readily done by the use of gelatin-coated pills. One pill may be given in the evening, or one may be given night and morning. The system rapidly becomes habituated to the use of jaborandi, and the dose has to be increased. Another good way of administering this drug is to use the inspissated juice by suppository. The fluid extract may of course be used by the mouth, but it is a less agreeable remedy.

"If jaborandi cannot be procured, there are other ways of inducing sweating which we have now almost entirely given up, although they are very efficient. Hot-air or steam-baths may be used for this purpose. In employing the hot-air bath the patient is covered with a rubber blanket, and a tube with an expanded extremity which is held over a spirit lamp is passed beneath the covering. In the steam-bath, the steam from an ordinary tea-kettle may be conducted through a piece of rubber tubing under the bed-clothing. These methods are not as promptly effectual as the administration of jaborandi, but at the same time there are circumstances when they may be required.

"There is another method of treating urgent uræmic symptoms which should be mentioned that is, bleeding. I should not hesitate to bleed a patient suffering with uræmia if he is not relieved by the measures described. As you are aware, the uræmic symptoms are dependent upon the retention of urea and allied substances in the blood, which, when they have accumulated to a sufficient quantity, act upon the nervous system, producing delirium and convulsion, or coma. The condition is, in fact, an intoxication. If under such circumstances the patient is bled and a pint or a quart of this blood removed, some of the poisonous material is taken away and the patient is relieved. In puerperal cases I believe that bleeding relieves not only by diminishing the vascular and nervous tension, but by removing the accumulated uræmic poison which has produced the symptoms.

"Another valuable remedy for the control of uræmic convulsions, which should not be forgotten, is chloral. So far as the relief of the convulsions goes, jaborandi is a slowly-acting remedy, because it operates by removing the poison from the blood. Something is needed to act upon the nerve-centres and obtund them, and make them less susceptible to the poisonous substance. Chloral often admirably answers this purpose. It may be given by the mouth or rectum. By enema the dose is one drachm. I have seen the convulsions stop almost instantly after such an injection.

"There is still another remedy which has been strongly urged by some, which should be used

with caution, and that is morphia. It is some years now since Dr. Loomis, of New York city, advocated the hypodermic administration of one-half a grain of morphia for the relief of the convulsions in acute Bright's disease. There is no doubt that in certain chronic forms of the disease, more particularly in the contracted kidney, the effect of opium is to increase the danger of uræmia; and Dr. Loomis states explicitly that this treatment is only applicable to the acute disease. I confess to being less particular in the use of opium in chronic Bright's disease than I used to be, always excepting contracted kidney; and where other remedies fail I would use a hypodermic injection of morphia in the uræmic convulsions of Bright's disease, but I should arrange the order of remedies rather as follows: jaborandi, chloral, bleeding, morphia.

"With such measures, these cases can often be brought to a satisfactory termination; and although the appearance of uræmia is a serious sign, yet it does not necessarily follow that the patient will die, and recovery therefrom in acute cases is not uncommon. Uræmic convulsions in chronic Bright's disease is a far more serious condition."

CAMPHOR INHALATIONS IN CORYZA.

Dr. G. E. Dobson writes in the *Lancet*:

This very troublesome complaint has scarcely received the attention it deserves, if we take into consideration the great number of sufferers and the serious laryngeal and pulmonary diseases to which it is too often a prelude. Amongst the host of remedies proposed for its abortive treatment, most of which are of doubtful value, or difficult to procure or apply, or even dangerous to use, not one can be named of which it may be said that it is at every one's command, easy of application, unattended with danger and really effective. No excuse is therefore needed for introducing to the notice of the profession the following simple yet thoroughly effective mode of treatment, which in my hands has never disappointed expectations.

About a drachm of camphor, coarsely powdered or shredded with a knife is placed in an ordinary shaving jug, which is then half filled with boiling water. The patient having made a paper cone) out of a sheet of brown paper or an old newspaper) large enough to surround his face with the wide extremity, and the mouth of the jug with the other end, proceeds to respire freely, at each inhalation drawing the steam into his nostrils, and at each exhalation forcing it up against the outer surface of his nose and the adjoining parts of his face. A twofold action is produced, the camphorated steam acts internally in a specific manner upon the whole extent of the mucous surfaces, and externally produces perfect diaphoresis of the skin covering the nose and sides of the face, there acting as a derivative from the inflamed Schneiderian membrane.

The jug should be surrounded by a woollen cloth in order to prevent the water cooling, or better, if a tin can be used, a small spirit lamp or heated iron may be placed beneath it, so as to maintain the heat of the water and the vaporization of the camphor.

The patient should continue his respirations keeping the margins of the paper funnel closely applied round his face from ten to twenty minutes, and this should be repeated three or four times in as many hours, till entire freedom from pain is experienced. Great relief is always felt, even after a first application, and three or four usually effect a cure. Camphor, or some of its preparations, have, as is well known, long been in use in the treatment of colds, but the above described method of employing it in conjunction with the vapor of water, both as an internal and external application at the same time, has not, so far as I know, been previously brought to the notice of the profession, or if brought, has not been recognized in any general or special medical work. The mode of application, however is all important, but as this is neither troublesome nor otherwise unpleasant to the patient, nor are the materials difficult to procure, camphor being everywhere a household drug, I believe that those who may give this treatment a trial will find it not only a simple but most effective remedy against coryza. —*The Practitioner.*

SCARLET FEVER: HOW TO LIMIT ITS CONTAGION.

W. A. Jamieson, M.D., (*Edinburgh Med Jour., March.*) The author states that the disease is scarcely if at all infectious in its earliest period, when most easily recognized, but it becomes day by day for a considerable time increasingly communicable. The susceptibility to the disease diminishes with advancing age. The contagium of the disease exists in the desquamated skin, and in the exhalations of the lungs. We have no available means of disinfecting the atmosphere of a room while the patient is in the apartment. The first essential is to isolate the patient and his attendants. The second is to use proper disinfectants about the throat, and over the skin of the patient during desquamation. We too often disinfect the patient's clothing and bedding, but forget to disinfect the patient himself. Warm baths should be used daily from the outset at a temperature of 95½ to 98½ F. After drying the skin the whole body should be anointed with the following:

℞ Acid. Carbol., ℥ ss.
Thymol, gr. x.
Vaseline, ℥ i.
Ungt. Simp. q. s. ad., ℥ i.

M. Ft. ungt.

The thymol must be dissolved by a little heat or its crystals will irritate the skin.

This should be used in the morning as well as

after the nightly bath. When the patient is well enough a thorough scrubbing of the whole body, the head included, with carbolic acid soap is useful to remove any lurking traces of infection. For the throat the best disinfectant is a saturated solution of Barff's boroglyceride in glycerine. The throat, tonsils and nose, if affected, should be brushed with this three or four times a day. It is painless and the taste not disagreeable. All linen used about the patient should be immediately put in a carbolized solution. The author thinks that if the plan above indicated has been carried out, it is unnecessary to isolate the patient for the whole period of desquamation. This is variable in different cases. The physician's injunctions are usually disregarded. The state of the patient's health and the stage of his convalescence are better guides to the time when he should be allowed to mingle with others.

The room should be thoroughly scrubbed and fumigated with sulphur. What protection is afforded by the above measure in cases in which isolation is impossible is illustrated by the following examples. A family in which there were five children occupied two rooms. None had had scarlatina. The oldest contracted from exposure, the parents refused to allow her to be sent to a hospital. The directions were carried out faithfully, and none of the others took the disease. In another family, also occupying two rooms, there were four boys and the parents. The youngest, aged 13, had a severe attack of scarlatina anginosa. He was delirious for days. All in the family assisted in the care of the patient and none took the disease. In no instance—and there were many—in which this treatment had been followed

PEPTONIZING OF MILK.

The pancreatic secretion digests milk that is rendered alkaline at 100° to 150° F. Milk thus treated becomes in 20 to 60 minutes thinner, resembling human milk in appearance, and if the peptonizing be continued beyond a certain point and is more complete, its taste is decidedly bitter. The process should be watched and the peptonizing suspended as soon as the bitterness becomes appreciable, for although more advanced peptonizing so changes the milk that it is more easily digested by the infant than when the peptonising is partial, yet the bitterness which is imparted to it renders it very disagreeable as a dietetic preparation. Milk thus prepared closely resembles human milk in appearance, and its casein is so digested that it is either not precipitated by acids or is precipitated like that of human milk in flakes. By this process a digested or an easily digested casein is produced instead of the casein of ordinary cow's milk, which produces large and firm masses in the stomach, masses which the digestive ferments penetrate with such difficulty that they cause indigestion and appear in the stools as coagula of greater or less size. Pfeiffer pointed out that when peptonized milk is employed "the feces showed absolutely no trace of the white cheesiness." Milk thus prepared quickly spoils, and it is necessary to peptonize it in small quantities and often during the twenty-four hours.

In New York during the last year, peptonized milk has been employed largely as recommended by Pfeffer, and with such results as to encourage its further use. It is now used in the N. Y. Foundling and Infant Asylums. Extractum pancreatis gr V, and sod. bicarb., gr. X are added to one gill of warm water. This is mixed with Oj of warm milk and placed in a convenient vessel in water kept at 100° F. for one hour or less if it begins to be bitter, when it is placed upon ice to prevent further digestion. With some specimens of milk, especially at a temperature of 115° to 120° F., a half hour or even less is sufficient. This artificial digestion is arrested either by boiling the peptonized milk, which destroys ferment, or by reducing its temperature to near the freezing point, which renders it latent and inactive, but does not destroy it. In the present state of our knowledge of infant feeding we can recommend no better substitute for human milk than peptonized cow's milk, which promises to be instrumental in saving the lives of many infants who by the old method of feeding would inevitably perish.—*Dr. F. Lewis Smith in Archives of Pediatrics*, July.

ANTISEPTIC UTERINE INJECTIONS IN PUERPERAL SEPTICÆMIA.

In the *Journal American Medical Association* of August 2nd, 1884, Dr. Madison Reece writes of the value of antiseptic uterine injections in puerperal septicæmia, and cites several interesting cases of women snatched from the very jaws of death by their persistent use. He uses a solution of permanganate of potash, two drams to the half gallon of warm water and strongly carbolized water. An injection is continued until the water comes away both odorless and colorless, and it is repeated according to the requirements of the case. A marked fall of temperature always follows their use. Dr. R. believes that puerperal septicæmia is often caused by infectious material from the finger-nails of the obstetrician, and says he will hail with delight the day when all puerperal women shall be treated by women obstetricians who attend exclusively to that branch of medicine. He uses in all cases twenty-four hours after confinement a vaginal injection of carbolized water, as affording relief to the patient, besides thoroughly cleansing the parts. Should the temperature rise the injection is made intra-uterine. For vaginal injections a pipe is recommended with the hole at the end closed, as uterine colic is sometimes caused by the water being inadvertently thrown through the patulous os into the cavity of the uterus.—*Md. Med. Journal.*

NEEDLESS AND USELESS COUGHING.

An exchange quotes the following from the *British Medical Journal*: There is in the world a great deal of what I am accustomed to call "needless, useless coughing." Where secretion takes place in the bronchial tubes it must sooner or later be brought up; and for this purpose some "necessary" coughing must take palace, or the patient will choke. But, both in organic diseases and in slight inflammatory or irritative affections of the air passages, there is often an immense amount of useless coughing,—useless, that is, as regards bringing up any laryngeal or bronchial secretion, and, far worse than useless, because it wears out the patient, prevents sleep, and moreover, increases the condition which gives rise to it, inasmuch as it lets the affected parts have no rest or peace. Now, the effects of opium are both local and general; and if in mucilage of acacia, or tragacanth, or in glycerine, or with a thickening solution of confection of dog-rose or honey, you give frequently from the one fortieth to the one-twentieth of a grain of morphia, you not only give a marvelous amount of peace and comfort to your patient, but, where it is remediable, you tend also to cure the disease. A favorite formula of mine, varied according to circumstances, is :

℞ Acetate of morphine,	-	1½ grs.
Nitric Acid, dilute,	-	1½ drs.
Oxymel of squill,	- -	6 "
Mucilage of acacia,	-	2½ oz.
Glycerine,	- - -	2 drs.
Syrup of red poppy.	-	2 oz.

Cinnamon or rose water suffcient to make the whole equal six ounces.

M. To take one or two teaspoonfuls five, six or seven times in the twenty-four hours.

The coughing in pertussis may be similarly relieved.

BOILS.

Dr. John Aulde, following the suggestions of Dr. Sidney Ringer, has met with most satisfactory results by adopting the following plan. The diet is to be regulated, and if constipation exists, a teaspoonful of magnesia sulph. in a glass of cold water should be taken every morning before breakfast.

℞ Calcii sulphidi,	grs. iij.
Saech. lactis,	grs. xxx.
Misce bene et div. in chart., No. xxx.	

Sig.—Five powders daily at intervals, between meals.

By this method, beginning boils will be aborted, and those far enough advanced to threaten a siege of several weeks and successive crops, will soften and heal in such short time that the patient will be surprised at the result. When they can be obtained, granules containing one-tenth grain are to be preferred to the powders. The urine should be examined for sugar, as boils and diabetes often go together.—*Medical Summary.*

EFFICACY OF BICHLORIDE OF MERCURY IN RINGWORM

Dr. R. W. Taylor recommends a solution of corrosive sublimate in tinct. of myrrh, four grains to the ounce, in the treatment of various forms of ringworm.

Eczema marginatum and ringworm in general were readily cured by thoroughly painting, twice a day, the affected part, with the parasiticide solution.

He believes that the tincture of gum-resins make excellent vehicles for various agents of skin disaeses.

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VICTORIA MEDICAL SCHOOL.

If the Montreal daily papers are correct, it is the intention of the Montreal School of Medicine and Surgery to throw off their affiliation with Victoria College, Cobourg, and apply to the approaching session of the Quebec Legislature, for power to confer degrees in medicine and surgery. We confess that the information surprises us. In the great struggle for its existence which Victoria Medical School made during the past five or six years it had our full sympathy, and we have not hesitated to express our admiration for the courage and cohesiveness displayed during that time by its Faculty. But in the new departure which this School is said to be about to inaugurate, it cannot, in our opinion, expect to receive the support of the Medical Profession of this Province or the sympathy of the Profession in the Dominion. The reason for this is obvious, for, so far as our information enables us to judge, we are not aware of British Legislation ever having conferred upon an incorporated school the power to confer University Degrees. We believe it would be a fatal mistake for any Legislature to make

legal such an anomaly. We can well understand the very peculiar condition in which this School now finds itself, as a Faculty of a distinctly Protestant University. Most unfortunately, and we believe most unnecessarily, our French Canadian friends, have been forced to mix up religion with the study of medicine. Edicts have been issued ordering Roman Catholics only to attend Medical schools of their own denomination. The result has been that the Victoria Faculty of Medicine in Montreal has advertised itself as a Catholic School of Medicine, although what such an institution is we confess we are quite unable to understand. We know of only one point in the entire study of Medicine where the religious aspect of the subject becomes of importance; we allude to the obstetrical problem which somtimes arises as to the necessity of destroying the life of a child *in utero*. All medical men well know that the Roman Catholic religion looks upon this subject in a way different from those of the Protestant faith. But every Protestant medical man respects and acts, when occasion requires, in accordance with the teachings of the Roman Catholic Church on this point. We believe we also state but the truth when we say that all obstetrical teachers in what are wrongly styled Protestant Medical Schools by our Roman Catholic friends, fully teach the desire of the Roman Catholic Church on this subject. With this single exception, medicine is a universal science, alike to Catholic or Protestant, Jew or Heathen, and any attempt to mix religion up with medicine is calculated to make a breach which should not exist in such a profession as ours. But having advertised themselves as a Catholic school of Medicine, Victoria must feel its position as exceedingly peculiar—for how can a Faculty of a Methodist University declare itself a Catholic Faculty. If it meant simply to announce that its individual members were Catholics it would not matter, for a man's religion has nothing to do with him as a teacher of medicine and should not debar him from being a member of any Medical Faculty. But it meant more—it was intended to convey the idea that the School would be directly under the control of the Roman Catholic Church. So long as the Montreal School of Medicine has been affiliated with Victoria we hazard the opinion that her denominational principles have never once been thrust upon it. That School, known to be entirely comprised of Roman Catholic gentlemen, was permitted to conduct its own affairs—even to opening its session by a solemn Mass; but when it advertises itself as essentially a Catholic School it strikes us the Senate of Victoria College, Coburg, may have intimated it were better the relation which has so long existed between them should come to an end. If not, then perhaps the School of Medicine has recognized the unfitness of things as now existing and by this intended movement are trying to arrange matters so as to sever affiliation and yet have University powers. While we recognize that the loss of powers which affiliation gives must, of necessity be deplored by the Faculty of the School, we cannot but very strongly condemn the granting to them of powers which, at all events under British Legislation, are confined to Universities. The unfortunate position the School would occupy if severance of affiliation occurs and the powers asked for are not granted, is not an argument which can brought into a consideration of the case. The trouble has been of their own or their friends making, and should prove to them the folly of forcing the religious element, where it certainly is not wanted.

MONTREAL SANITATION.

The fair city of Montreal has a Board of Health, or rather a Health Committee of Aldermen. The gentlemen of the Council apparently do not consider this Committee of much importance unless as a sort of training school, as they shelve their new members thereon until such have gained sufficient experience in ways peculiar, fitting them for higher spheres.

The result is, that men are called to discuss sanitary matters and to adopt measures relating to public health who have never given any previous consideration to the serious problems before them. It cannot therefore be surprising to find these efforts at sanitary legislation somewhat rudimentary, and for the most part experimental. With a couple of exceptions, such are our sanitary directors—the members excepted have the technical knowledge necessary to aid the Board in its deliberations, but, judging from some of the past meetings of this Board, their suggestions appear to have little weight. Indeed, bickering personalities and squabbling seem the rule, and those most ignorant believe themselves to be the only true fountains of sanitary knowledge. What may be styled a burning question has occupied the attention of this junior committee for some time past. This originated from the necessity of finding a

means of disposal of night soil as their contractor had been fined for depositing, or rather *spreading*, the material on a field in a newly annexed municipality and also adjacent to the City Reservoir. The object of the contractor in doing this was to obtain, by natural evaporation, a fertilizing material out of which a profit could be made. Very properly, this procedure has been legally condemned, and the question of how to dispose of the contents of cesspools came up.

The opinion of an eminent scientist was obtained, but we must be pardoned if we fail to acknowledge that the system of dry earth closets which he advocates can meet the desired end. There can be no doubt of the value of earth closets if properly worked and used by persons of intelligence. In Montreal the majority of such people reside in houses containing water-closets, and who require no such system. It would be perfectly useless to recommend to the great mass amongst whom cesspools abound a plan the intention of which they cannot appreciate,—a class belonging chiefly to the lower and more ignorant grades of society, who are in the main regardless of any sanitary precaution the utility for which they cannot be taught to understand. It is a strange fact, although true, that civilization destroys those instincts which induces the savage to adopt sanitary measures necessary for his well-being; and leaves the lower classes of our larger communities to grovel in filth and disease, and it is for such chiefly that sanitary laws are wanted, as this class is mostly affected by faulty arrangement in the disposal of sewage. As a result of their deliberations the Committee concluded that to burn or dry up the obnoxious substance was the best plan for getting rid of it. It has been estimated that an additional sum of $8,000 would be required for this purpose. But for the Chairman of Finance this depletion of civic funds would have been fixed upon the city for a number of years.

Fortunately, this gentleman, who seems to have very grave doubts of its success, objected to binding the city for any period, so that, as it will be tried experimentally, the Council can at any time withdraw from the arrangement should it prove unsuccessful. We have not learned what is to be done with the residue after incineration, but suppose it will remain a perquisite of the contractor.

If this gentleman wants to convert this material into fertilizer let [illegible] by [illegible] Clark & Co. as [illegible] long as it is [illegible] [illegible] [illegible]

tural drain fall, and a large river in front of us to carry it away. Better spend the money in increasing our water supply, than waste it on a fancy. Until health matters become of more importance than at present and a Board of Health is formed independent of the whimsicalities of aldermen but little hope can be expected of an improved sanitation.

PHYSIOLOGICAL EXPERIMENTS ON DIGESTION, ALIMENTATION AND NUTRITION.*

While the diastasic activity of Maltine has been fully demonstrated by chemical experiment outside the body, by almost every known chemist, it has remained a moot point whether diastasic action is not arrested in the stomach by the acidity of the gastric juice. Prof. Haines proves that, while acids in excess will retard, or even destroy diastasic action, yet the proportion in which they exist in the stomach produces an exactly opposite effect. Dogs were selected for the experiments made by Prof. Haines, and, although the gastric juice of this animal is rather unfavorable for such investigation (being of somewhat higher acidity than that of man) results proved that the acid reaction materially hastened, instead of retarding, the conversion of starch. Prof. Haines concludes his interesting report in the following words: "I believe, the digestive action of Maltine "on starch, instead of being stopped by the "gastric juice, is generally much accelerated by "its presence. The idea, therefore, that widely "prevails that malt preparations lose their virtue "in contact with the acids of the stomach is, I "am convinced, unquestionably erroneous. On "the contrary, the acids of the stomach, at least "in the earlier stages of digestion, strongly stimu- "late diastasic action, and, therefore, to get the "best effect from such a preparation as Maltine, it "should be administered as soon as possible after "eating, or even during the meal itself; its action "will then be accelerated by the gastric juice,—it "will have an abundance of time to act on the "starch of the food taken, and, by rendering it "soluble and absorbable, it will remove it from "the stomach in the early stages of digestion, "and, consequently, leave the albuminoids of the "food undisturbed by other substances, to be "more rapidly and more efficiently acted upon by "the pepsin of the gastric juice.

*H. P. Gisborne, 10 Colborne st., Toronto.

BARAVENA MILK FOOD.

We would call attention to this new and valuable food for children, which comes to us recommended by many well known Canadian physicians. We gladly add our own word of commendation for the preparation. It is an absolutely pure compound of specially prepared farina of wheat and barley, in which the starch has been converted into dextrine, combined with pure milk and sugar, so that when mixed with water, as directed for feeding the child, it contains all the casein, butter, sugar, and other mammalian constituents nearest in quality and quantity to mothers' milk of any food made. The analyses of Dr. Edwards and Dr. Ellis, ordered by the Government, are eminently satisfactory.

THE ANNALS OF SURGERY.

We gladly welcome the issue of the *Annals of Surgery*, a monthly publication, to be issued simultaneously in St. Louis and in London, Eng. It is the successor to the *Journal of Anatomy and Surgery* formerly published in Brooklyn, and is the first and at present the only journal published in the English language devoted entirely to Surgery. Judging from its first issue it is to be of a high standard, and it certainly has a large and important field to work in.

LOCAL AND GENERAL.

Our quinquennial small-pox epidemic is now due. When it comes, as it probably will next winter, and has passed, some interesting questions may be answered. Have the vaccination activity lately displayed by our city council and the increased sanitary precautions done much to limit the prevalence of the disease? Have the vaccinated and re-vaccinated resisted to a greater degree the influence of the disease? What sections of the city have suffered most? Unprejudiced replies would furnish a valuable contribution to the literature of the vaccination question.

I understand that the epidemic lately raging north of Belleville has about died out. The Ontario Board of Health deserve credit for the way in which they dealt with this dreaded disease, and to their exertions is largely due the prompt extinguishing of the plague. Some political capital has been sought to have been made out of the action of the Government, but it will probably not amount to much.

So they are going to burn the city refuse. A good way to *purify* any community, but an expensive process withal. If I am not greatly mistaken the contractor will be obliged to apply to the council for aid before the year is out, unless he can discover some way of utilizing the inorganic residue for fertilizing or other purposes. Fertilizers are not popular, in Quebec especially. To settle down on new land, to absorb its phosphates for wheat, use up its silex for straw, and never think of returning any of the borrowed elements of plant growth until the impoverished land refuses longer to furnish the requisite food. This is the preliminary, not to the employment of artificial fertilizers but, to moving West—to more new land.

Even empirical proceeding called "manuring," valuable as it is, is not carried out on most Lower Canadian farms with any system or with any regard to the wants of the particular farm.

We have an example of this in the Verdun night-soil nuisance. Those doctors who were brought up to show what an innocent compound city garbage and fæcal refuse make, had doubtless advanced a step or two in their agricultural strides, but their sanitary education, it seems to me, requires considerable extension.

If the vile odors and the damp exhalations and the water-carried germs which are constant derivatives of exposed night-soil heaps are perfectly innocuous why carry the city refuse so far away as Verdun? Are there no celery beds and cabbage gardens, to say nothing of floricultural patches, within the city limits capable of revival by this effectual means? Surely it ought not to be necessary to prove that a particular set of water-closets contain the microbes of some specific disease before they can be shown to be unfit as a source of fresh fertilizers!

Too much stress is placed now-a-days on the microscope, and not enough on the nasal organs as a detector of disease. Not, as every one knows, that all deleterious substances have a repugnant odor, or that every innocent thing has an agreeable smell, but it may be laid down as a rule that when *in loco natural*, when not chemically separated from their usual surroundings, compounds antagonistic to the organism insult the nerve extremities of the Schneiderian membrane.

Beyond admiring the measures of Dr. Larocque, very little of practical value has been the outcome of the meeting held in the city last Friday to discuss with representatives of the City Council and Provincial Legislature the proper means to be taken regarding the probable visit next year of Asiatic Cholera. Once the disease has gained a foothold it will be extremely difficult to prevent its spread, and the only course open, after using strict quarantine regulations, is to keep the towns and cities clean, to pay strict attention to personal cleanliness, to avoid as much as possible affected quarters, to drink well-boiled and *well-filtered* water and to eat only thoroughly cooked food. It is not necessary to dine, *a la* Klein & Gibbes, on raw cholera cocci.

I presume these latter members of the Anglo-Indian commission are now in England as, from last accounts, they intended leaving India in the beginning of the year. Their investigations have, in my humble opinion, thrown no light whatever on the real nature of the cholera poison. I must admit, however, that it is hardly fair to speak positively until one has had an opportunity of reading their report in full. Their theory as to causation of the disease and their suggestions in the way of its prevention, to say nothing of the still more important question of individual conduct during an epidemic, will be awaited with interest.

According to the *Lancet* (London, Jan. 3rd) a partial report has been sent to the Indian Government, in which it is plainly stated that they do not agree with the views held by Koch. Generally they think that so far no specific cholera germ has been found. "Not only that, but mucous flakes and other discharges from patients dead from acute cholera have been fed to and injected under the skin of monkeys, cats, rats and other animals, and yet the animals remained normal.

Again the cultivation of the "comma bacilli" of Koch and the mucous corpuscles (with and without bacteria) so frequently found in the intestines of people dead of cholera (and other diarrhœal diseases) did not show that they behaved differently from putrefactive organisms. In the face of this report what shall we of the rank and file tell our patients? To keep clean within and without?

P. A. LAVER, M.D.

February 16th, 1885.

REVIEWS.

A Practical Treatise on Massage, its History, Mode of Application and Effects. By DOUGLAS GRAHAM, M.D., Fellow of the Massachusetts Medical Society.

We have read the above work with considerable satisfaction.

It is not an echo of the various articles upon the subject which have from time to time appeared in Medical Journals throughout the country, but is a creditable, systematic and faithful fulfilment of the promise involved in the title page.

Massage just now is as fashionable in the United States as electricity used to be, and we in Canada should try to avoid the extremes to which, doubtless, our American cousins will run. Dr. Graham's work will act as a deterrent in this direction, for throughout the whole 275 pages a wise moderation prevails. Where a trained nurse cannot be had it will be seen, on perusal of Chapter III, how unfair to the patient and to the reputation of the remedy it would be to leave the carrying out of the necessary details to any chance assistant.

Let the medical attendant roll up his sleeves with a determination to allow of no perfunctory work in *his* practice. As, says the author (p. 35): "visits for massage are not more arduous than many visits in surgical, obstetrical and gynecological practice, indeed often less so, besides being much less disagreeable. Physicians daily render service that no menial could be hired to perform. French, German and Scandinavian physicians often apply massage themselves without any thought of compromising their dignity; and when such men as Drs. Brown-Sequard, Weir Mitchell and others have tried their hands at it I do not see why American and English physicians should not make use of it oftener than they do."

CORRECTION.

In Dr. Mattison's original article in our last issue, page 82, "release" should read "relapse." Next column 25 to 30 grammes, should read .25 to .50 gramme. His name was also wrongly spelled. It should be Dr. J. B. Mattison and not Mattinson.

PERSONAL.

Dr. Francis J. Wilson is spending the winter in the famed Ojar Valley, California. His health has improved markedly since he has taken up his residence in the Mountains of California.

Dr. Osler, late of McGill University Faculty of Medicine, but now of the University of Pennsylvania, sailed for London on the 10th inst., where he will deliver the Gulstonian Lectures, his subject being "The Pathology of Endocarditis. He returns immediately on the conclusions of the Lectures.

Dr. Sullivan, of Kingston, has been elevated to the Senate. The appointment is an excellent one.

Dr. Vineberg is still in New York pursuing his Gynecological studies, to which branch of the profession he intends to devote himself in the future.

We learn that Dr. Wolfred Nelson, of Panama, the first Matriculant of the Medical Faculty of Bishop's College, leaves for his annual holiday in March. This year he intends doing the Republic of Nicaragua, C. A., crossing it from ocean to ocean, visiting its lakes that are famed for [illegible] and rivers.

Dr. James Babtch, a Scotch physician, died of yellow fever at Panama in December. His death took place thirteen days after arrival. He had applied for employment with the Canal Company.

Dr. Ponjade of the Canal Company died suddenly in November of congestive fever.

Dr. F. D. Gilbert, of Sherbrooke, has gone to California for the benefit of his health. If the climate agrees with him it is possible he may decide to remain there permanently.

Dr. O. C. Edwards of Indian Head, N.W.T., has been in Montreal for about a month on a visit to his friends. He leaves for home the end of February. We are glad to see Dr. Edwards looking as if the climate agreed with him.

THE CANADA MEDICAL RECORD.

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CHOLERA.*

A FEW PRACTICAL REMARKS ON ITS PREVENTION,

BY

R. T. GODFREY, M.D.

Having been extensively engaged in the treatment of cholera during its several visitations, it affords me much pleasure to offer the following remarks, which I trust will be found useful in the prevention of this disease. It therefore may not be out of place to state my views of the often-asked question: What is cholera? I believe the disease to be due to the entrance into the blood of a poison, animalcular in character, communicated generally through the alimentary canal by means of the water we drink. This water having been contaminated by this specific poison.

When the choleraic poison finds entrance into the system its germs multiply themselves indefinitely like all other animalcular disease, until nature in making an effort to throw off the disease, pours the serum of the blood into the alimentary canal, and, as a consequence, the blood becomes so thickened that it cannot circulate through the smaller blood-vessels. The circulation is therefore impeded, cramps ensue, followed by collapse and death.

Every casual observer must have noticed that cholera travels inland, along the different navigable rivers and canals; in its several visits to this country it has always followed this course. First going up the St. Lawrence and down the Mississippi, next adopting the opposite routes or by whichever channel the stream of emigration travelled. It has also been frequently remarked that the inhabitants of one side of a river have been decimated, while those on the opposite side have escaped. Along some of our canals it had been so fatal, that men could be obtained with difficulty to open the locks for navigable purposes.

During its visits to this city it was a remarkable fact that what might be called one of the healthiest localities, the east end, where the soil is high, well-drained and gravelly; also along the banks of the river for several miles down, where the banks are high and the locality free from stagnant water the mortality was greatest; caused by the fact that the residents drank the water that was taken from the side of the river, below where the shipping was moored and where the city drainage entered. In 1854 the new water works were completed to the south side of Papineau Square. Below this line the mortality was greatest. In this year three rafts were moored on this side of the river below the toll gate, and two on the Longueuil side; while those on this side lost nine men from cholera, those on the opposite shore did not lose a man.

These circumstances, with many others, have convinced me that cholera is propagated through the water we drink, which has been previously contaminated by diseased dejections from a cholera

* Dr. Godfrey has kindly furnished us with the above extracts from his paper read before the Medico-Chirurgical Society of Montreal, January 26th, 1866.

patient, and I consider that this choleraic poison, when thrown into water increases its contagious power so rapidly as to affect a river for miles down.

Should the cholera again visit this city we may safely predict it will not be so fatal as on former occasions. In consequence of the supply of water from the new water-works being obtained above the source of contamination, it will be confined almost exclusively to persons engaged on the river, and who do not use the proper precautions for preventing their being affected by the water.

Presuming the disease to be taken from the water, we would naturally ask ourselves the question, what is the most simple and efficacious method of making the water fit for use and destroying the poison it contains? In reply I would say, simply, by having all water boiled before using it.

Every householder should have a jug of water that had been previously boiled and allowed to cool standing on the side-board, or in some convenient place ready for use, and should be particular that no water is drank by any individual until it has been thus prepared. Boiling destroys all possibility of any contagion remaining in the water, no matter how infectious the water may have hitherto been. Should the plan of boiling be adopted there will not be the slightest necessity for brandy, whiskey, camphor, sulphur, charcoal or any other prophylactic being put into it.

Before closing these remarks, I may add one more hygienic observation that I trust will be useful. Where the out-buildings are in close proximity to the back of the dwellings, it will be necessary to have a ventilator of sufficient size taken below the seat of the water-closet or carried a sufficient height above the roof to secure a good draught. By observing those simple precautions both you and your patients that are not already affected will be as safe in the midst of cholera as if there were not a case within a thousand miles of you.

Gentlemen, should it be agreeable to you, I shall be happy to read on a future occasion a few observations on the treatment I have found most successful in this disease.

1360 St. Catharine St.,

MONTREAL.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Nov. 21st, 1884.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

Dr. SUTHERLAND exhibited two pathological specimens.

1. *Myeloid Disease*, involving all the tissues of one thigh, in a girl aged 18. When first seen, the symptoms were those of sciatica; a fortnight later a small lump was felt, which, in another two weeks, had enlarged to double its size. A lance was plunged into it, as it felt like an abscess; only blood came away. About a month after, she was admitted into the hospital; but too late for surgical interference, there being no healthy skin left in the neighborhood.

2. *Heart having warty Aortic Valves.*—This was removed from a man aged 30, a hospital patient, in whose brain was also found softening of the parts supplied by the right middle cerebral artery. About ten months previous to entering hospital he had recovered from an attack of hemiplegia. In this case there was a history of repeated attacks of acute rheumatism.

Abnormalities.—Dr. WM. GARDNER described two abnormalities which he had lately come across in his practice. The first was a case of double uterus, os and vagina, the latter being divided equally by a septum. Patient was a young married woman, not pregnant. The second case was one of absence of the urethra in a sterile married woman. Where the urethra should be is a pit about one inch deep, at the end of which is an opening with a fringe-like border leading into the bladder. The opening was large enough to easily admit the finger into the bladder. She has never suffered from incontinence, except during the past few months, and then only when in the upright position.

Dr. TRENHOLME had lately seen a woman with a double vagina, os and bicornuated uterus.

Idiopathic Neuritis of the Brachial Plexus.—Dr. STEWART showed a well-marked case of this disease. The patient is a man aged 35, and, until seven months ago, when his neuritis suddenly set in, enjoyed perfect health. There is complete

paralysis of all the extensors of the fingers and hand, also of all the flexors except the ulnar, which is only in a paretic state. There is complete loss of the thumb movements. He cannot flex his forearm, neither can he pronate or supinate it. Shoulder movements normal. There is marked atrophy of the paralyzed muscles. The deltoid and the spinati are also in a state of atrophy, but it is slight compared with the wasting of the paralyzed muscles. The paralyzed muscles do not respond to the faradic current. There is both quantitative and qualitative change to galvanism. The A O Z < K S Z, while the A S Z = K S Z. The skin of the paralyzed hand is glossy, and at times presents bluish spots. There is marked anæsthesia in the ulnar region of the fingers and hand. All other parts are perfectly normal in their sensation. Very slow improvement is taking place from galvanism.

Tait's Operation.—Dr. TRENHOLME reported six cases of removal of the uterine appendages, with their results. The operations were made during the year ending April 1st, 1884. The similarity of these cases renders it unnecessary to give details of each, the symptoms being intense pelvic suffering directly connected with the continuance of the menstrual function. In all the cases the ovaries were enlarged and diseased; in some the tubes were also affected. The operations were made without the use of the spray, but the hands, instruments and sponges were cleansed in a weak solution of carbolic acid and water. The ligatures used were of shoemaker's white thread, No. 20, carbolized over night. This ligature has always been the doctor's favorite in abdominal surgery, and although he has tried silk he would not do so again. The plan followed was to use single ply of the thread, and where the tissues to be embraced were more than could be safely included in a single ligature, he resorted to the application of several ligatures, rather than use double or multiple thread. This thread, untwisted, is a safe ligature, never has failed in his hands, and has never given rise to any perceptible irritation, even when as many as forty or more have been left in the abdominal cavity. Dr. Trenholme also discards abdominal bandages, trusting to the deep silver sutures to secure coaptation. Horse-hair is used for the superficial sutures, the wound is dressed with carbolized gauze, and over all two or three strips of strong adhesive plaster are placed to lessen the tension on the sutures. By carefully dividing the sheath of the rectus muscle (on either side), and not wounding the muscle itself, and also by carefully excluding the muscular tissue from the deep sutures (*a la* Goodell), we secure, as well, perfect union by first intention. This was the case with all the reported cases where this plan was carefully followed. In all these cases a slight metrorrhagia occurred on the second or third day lasting several days; also, all the patients suffered for several months afterward from flushes of heat and hot perspiration. In one case the patient had a slight bloody discharge on two separate occasions, of about ʒi. each time. As to the results, cases 1 to 3 have been followed by satisfactory results, the patients being now capable of performing the household duties appertaining to their respective stations in life. In all but one of these cases the cure has been complete, and even in the exceptional one, the return to health continues to advance with progress of time, the chief impediment being due to hernia of the bowel. Cases 4 and 5 were complicated with mental disturbances. No. 4 has not been appreciably benefited by the operation. There is still needed to determine what improvement may yet take place. Case 6 is of special interest. Here suicidal mania followed long-continued disease of the uterine appendages. With the supervention of the mania, the pelvic suffering ceased. Both ovaries were diseased, and their removal has been followed by most gratifying results to patient in every way. Her mind has been greatly improved —no more mania—and her physical condition so improved that she is able to take an active part in the duties of a farm life.

In the discussion which followed, Dr. Trenholme advocated the study of mental diseases in connection with disorders of the generative organs both male and female, and said he believed a great field was opened up worthy of further exploration. He also spoke of the great benefits to society that would result from the castration of tramps and confirmed criminals.

Dr. HY. HOWARD said he believed in a physical cause for mania. In case No. 6, operated on by Dr. Trenholme, anæmia of the brain may have been caused by menorrhagia. He said men have become maniacal the first night of their marriage from anæmia of the brain, being produced by peripheral irritation. Good food, air and exercise will cure such cases. Cases of mania produced by anæmia of the brain are more curable than if caused by hyperæmia.

Dr. Gardner congratulated Dr. Trenholme on the result of his cases, and on being one of the pioneers of an operation which has attained such a good position in surgery. He had operated in four cases. One, a very difficult case, with numerous adhesions and troublesome bleeding, proved fatal from peritonitis. In two of the remaining three the result was satisfactory, but the recovery slow. The third still suffers very much, probably from pelvic inflammation, set up by a long cold drive on her way home after the operation. There could be no doubt of the propriety of the operation in cases of palpable disease of the appendages, with local symptoms, with or without neurotic symptoms sufficiently severe, and in which other treatment failed to relieve. As to cases with purely neurotic symptoms, aggravated at the menstrual periods, there is room for doubt as to the propriety of the operation. Hegar and other eminent German authorities, at the last International Congress, had declared in favor of it while Spencer Wells and others were opposed to it. The neurotic element, in many of the cases, must be recognized and treated. The successful gynæcologist must also be in some measure a neuropathist. It is probable that certain cases reported cured by this operation might have been spared the mutilation, and cured by a treatment mainly tonic and neuropathic. Every gynæcologist must admit that there are cases of enlarged diseased ovaries in women capable of a good deal of activity—mental and bodily. All his patients had suffered more or less from the disturbances, vascular and other, which attend on natural meno-pause. In none of them had ventral hernia occurred, but he had taken care that each patient was fitted with an efficient abdominal supporter before being allowed to leave her bed.

Dr. Armstrong said he had operated twice for removal of the tubes and ovaries. His first case was a success every way, though recovery at first was very slow. His second case has fully recovered from the operation, but sufficient time has not elapsed to say what will be the permanent effect.

Stated Meeting, Dec. 5th, 1884.

T. G. Roddick, M.D., President, in the Chair.

Dr. Shepherd exhibited a large tumor which he had lately removed from the left parotid region. The patient was a woman aged 47. Tumor appeared as a small lump below the ear four years ago; it increased slowly, but was not painful until lately. The tumor, during the last six months, had grown more rapidly, and had produced some facial paralysis. There was no interference with the circulation. The tumor was partly beneath the sterno-mastoid, and firmly fixed by the parotid fascia. The removal was tedious and difficult, owing to tumor not being very well defined. The external carotid artery was tied, and the fascial nerve had to be sacrificed. The patient recovered rapidly, and had no elevation of temperature. On examination, the tumor was found to be a fibro-adenoma. The second day after the operation an ulcer developed in the cornea, which took some time to heal. This was probably caused by an edge of the bandage coming in contact with the open eye.

Tumor of Bladder.—The President exhibited a cystic papillomatous tumor which he had some weeks previous successfully removed from the bladder. A microscopic section of the tumor was shown. The history of the case is as follows:—Geo. T., age 53, was admitted into the Montreal General Hospital, Oct. 27th, complaining of much pain and difficulty of micturition, and pain over the region of the bladder, with frequent over-distension. Symptoms began ten years ago with occasional difficulty in micturition. Three years ago, noticed blood in the urine for the first and only time. At this time he made water every hour, with pain before the act; pain chiefly referred to the end of the penis and neck of the bladder. Catheterization now became frequently necessary. When admitted into hospital, made water every hour, but from a bladder distended to the extent of a couple of pints would evacuate three or four ounces. There was constant hyper-distension of the bladder, forming a distinct tumor, extending sometimes to near the umbilicus. There was great pain in the left iliac region, especially during the act of micturition. Prostate very slightly enlarged. The bladder was sounded carefully, but nothing definite could be made out. Dr. Roddick thought the case was either one of encysted stone or tumor of the bladder, so decided to explore the bladder carefully, after the manner of Sir Henry Thompson. This he did on Nov. 12th. A staff was introduced, and the membranous portion of urethra cut down upon. The finger was then introduced through the pros-

tatic portion, and almost immediately something was felt. On examining more carefully, Dr. Roddick discovered a pediculated tumor attached to one side of the neck of the bladder. This he freed with his finger-nail and extracted. The tumor was almost as large as a hen's egg. For a few days the man had some elevation of temperature, but now he was convalescent, and was passing his water by the urethra. Dr. Roddick remarked that he had several times explored the bladder as in this case, but that this was the first time he had ever discovered a tumor.

Dr. Molson presented to the Society two large calculi which had been lately passed by one of his patients, who had had frequent attacks of renal colic and bloody urine.

Lead poisoning.—Dr. Mignault then read a paper on two cases. The first case was well marked. Patient, a young woman, came under his care at the Hotel Dieu Hospital, suffering from wrist drop, constipation, colic, and distinct blue line of gums. There was also extreme wasting of the extensor muscles, and also of the muscles of the ball of the thumb; this wasting had been rapid. The source of the lead poisoning had been traced to some pickles which the patient had eaten in large quantities three or four times a day, having been advised to do so for loss of appetite. Lead was found in large quantities in the vinegar used to preserve the pickles. There had been several similar cases in the neighborhood where the woman lived which had all been traced to the eating of pickles. In the second case, the poisoning was also due to the eating of pickles. In this case, besides the wrist-drop, blue line, colic, &c., there was marked melancholia and mental depression.

Dr. F. W. Campbell looked upon mental depression as frequently present in lead poisoning. He advised large doses of iodide of potassium to be given—half to one drachm doses.

Dr. Gurd explained that the common kinds of pickles were kept in glazed earthen jars before being bottled, and that oxide of lead was used for glazing the cheaper earthenware; this, when brought in contact with vinegar, was dissolved out in the form of the soluble acetate of lead, and so poisoned the pickles.

Drs. Gardner, L. Smith and Molson, each reported a case of lead poisoning. Dr. Molson's case ended fatally, and delirium was a marked symptom from the beginning. The man had been employed mixing paints for some two months, and the attack commenced with colic, later there was constipation and mental depression, then delirium. The wrist-drop only came on during the last three weeks. Patient died of exhaustion.

Dr. Jas. Bell said that there were two kinds of lead poisoning—acute and chronic—and he had, whilst medical superintendent of the Montreal General Hospital, seen many cases of both kinds. He believed, in the chronic form wrist-drop was a remote symptom, and not accompanied by colic, as in Dr. Mignault's cases. The blue line could be caused by other sulphides than lead. He thought the rapid wasting of the muscles not a common symptom in lead poisoning, and suggested that Dr. Mignault's first case was not one of lead poisoning at all, but due to some trophic changes. It looked very much like a case of polio-myelitis of spinal cord.

Dr. Jas. Stewart asked if the deltoid muscle was affected. He said in any case of paralysis the extensors were the first to suffer, and, last of all, the intrinsic muscles of the hands. If these were affected early, he thought Dr. Mignault's first case might not be entirely due to lead poisoning.

Dr. Hy. Howard wanted to know how the iodide of potassium acted, and the effect of the lead on the nervous system. He said: It is a remarkable fact that in all cases of muscular atrophy and paralysis of parts from poisons, so much depends upon the poison as to how the nerve centres are attacked. For example, in the case under consideration, lead poison, the highest centres—that is, intelligence—although the lowest organized, is the last attacked; the first being the afferent or peripheral sensory nerves, rendering the parts anæsthetic. Now, because the trophic nerves are paralyzed, they can no longer perform their function; and, in accordance with the natural law of waste and supply, or of evolution and dissolution, it is all waste and no supply, consequently atrophy of the part that has been deprived of its supply. The next stage is the natural consequence of the first, the peripheral nerve lesion—that is, motor paralysis—and why? Because the roots of the motor nerves leaving the spinal cord, as well as the cord itself, are supplied by these trophic nerves, consequently these parts lose their supply, and the waste causes paralysis of the motor nerves. Thus do we account for the atrophy and paralysis of a certain group of muscles from the toxia of lead poisons, and, I have no doubt, for other functional symptoms that we find in cases of lead

poisoning, remembering that all functional symptoms are due to structural cause. With regard to toxia from alcohol, it is a fact that the first organs affected are the highest nerve centres—viz., intelligence. A man first becomes a fool from the poison, than the sensory nerves become paralyzed, and he is anæsthetic—that is general anæsthesia; and the last stage of the poisoning in both is hemiplegia.

Dr. MIGNAULT, in replying, said that the symptoms of the acute and chronic forms might exist together, the one passing insensibly into the other. In the first case the deltoid muscle was apparently normal. He was certain that the muscles of the thumb atrophied early and rapidly.

Hydrochlorate of Cocaine.—Dr. BULLER, on being asked to give his experience with this new local anæsthetic, said:—On the 7th of November I commenced using the new local anæsthetic (cocaine) in operations upon the eye, and have had an opportunity of testing its merits in quite a variety of cases. Under its influence I have performed iridectomy five times, extracted two senile cataracts, removed four tarsal cysts, discision of capsular cataract twice, opening of the canaliculi twice, and operation for obstruction of the lachrymal duct once. I have always used a four per cent. solution. The results have been gratifying, but not entirely satisfactory. The first iridectomy was for artificial pupil on account of a central leucoma of long tanding. Two instillations at an interval of five minutes. Ten minutes after the first instillation, grasping the conjunctiva with fixing forceps caused no discomfort. The operation was performed in the usual way. In reply to my question, "Did you feel any pain?" the patient, an intelligent man, said "No, I cannot say that I did." In iridectomy for lamellar cataract, preliminary iridectomy for senile cataract, and for acute glaucoma, I was equal fortunate. In one case of iridectomy for commencing staphyloma following ulceration of the cornea from purulent ophthalmia, the patient complained considerably of pain during the operation, notwithstanding four applications of the drug at intervals of five minutes. There was in this case an incomplete anæsthesia, ascertained by testing the relative sensibility of the conjunctiva of the other normal eye. Perhaps the still somewhat infiltrated and swollen conjunctiva had been rendered less susceptible to the action of the drug by the recent inflammatory process. In one case of senile cataract, the anæsthesia was all that could be desired; in the other, the patient became restive before completion of the incision, and gave me a good deal of trouble before the operation was satisfactorily completed. In both, the result of the operation was perfectly satisfactory; and I may say that I have not observed the slightest ill-effect from the use of cocaine up to the present time. In one case of discision of a partially absorbed traumatic cataract, repeated instillations failed to produce any anæsthetic effect, and the patient complained of pain quite as much as if no anæsthetic had been used. The same solution had proved perfectly efficacious upon another patient a few minutes previously. It would therefore seem that some eyes cannot be rendered anæsthetic by the use of a 4 per cent. solution of cocaine. For the removal of tarsal cysts, the pain was only trifling after three or four instillations of the solution; so also in slitting the canaliculi, and was certainly diminished even in the operation of opening the nasal duct.

Dr. GARDNER had removed a urethral carbuncle without producing pain by means of cocaine.

Dr. ALLOWAY had opened a large retro-vaginal abscess painlessly with a 4 per cent. solution of cocaine.

The PRESIDENT reported a painless operation upon himself by means of cocaine. He had, in fact, pulled out one of his own double teeth. He applied a 4 per cent. solution by means of two bits of lint for some 15 minutes before "putting on" the forceps. The tooth was firmly fixed, and he only felt a slight pain towards the end of the operation.

Neuritis of the Brachiol Plexus.—The discussion on this case (exhibited at the last meeting by Dr. Stewart) now took place.

Dr. HY. HOWARD said: Whether the etiology of this case be idiopathic or traumatic, or, more properly speaking, whether it be due to chemical or mechanical lesion, it is a case in proof of my theory that peripheral, or trophic, or sensory paralysis is followed by muscular atrophy and motor paralysis. This case went to prove the now established physical fact that alterations or change of animal organisms—that is, of structure—creates change of function, and that change of function is necessarily followed by change of conduct. These truisms explain how the sane man of yesterday is the insane man to-day; how the rascal of yesterday is the saint of to-day; the immoral of yesterday the moral of to-day; the irreligious of yesterday the sanctified

of to-day ; and how so many people deceive themselves, mistake structural and functional changes for supernatural cause of effect.

Stated Meeting, Dec. 19th, 1884.

T. G. RODDICK, M.D., President, in the Chair.

PATHOLOGICAL SPECIMENS.

Dr. KENNEDY exhibited some inky black sputum expectorated by a middle-aged man, a painter, who enjoys good health. He has been expectorating this black sputum for about seven years ; never much at a time, but lately is rather worse. It comes just after a slight cough, and is at first viscid. He has never inhaled carbon. There are over his body several melanotic spots. Dr. Kennedy suggested that he may be eliminating pigmentary matter from the lungs. It was not chemically examined. Dr. Kennedy promised to further investigate this case, and bring it again before the Society in the form of a paper.

Malignant Disease of the Œsophagus, causing stricture.—Dr. Ross exhibited the specimen and related the case :

J. W., aged 54, was admitted to Hospital Dec. 10th, 1884, suffering from a severe attack of acute pleurisy, with effusion, commencing twelve days before. *Previous history*—Difficulty in swallowing for six months previously, beginning with sudden obstruction in swallowing glass of hot spirits ; since then was unable to swallow solids, but could readily take liquids ; was a hard drinker, and a subject of constitutional syphilis ; no family history of cancer. Owing to patient's serious condition, no examination by bougies was made, but he stated that three months before admission Dr. Perrigo had treated him for stricture of gullet, with some benefit ; he stated also that he had lost weight rapidly since beginning of illness. Patient, from the first, was very weak, gradually sank, and died on Dec. 17th. *Autopsy*—Right pleura contained 40 ozs. thick, yellow, very turbid serum. Right lung collapsed ; surface covered with a thick sheeting of lymph ; no pneumonia. Left lung normal. Heart normal. Œsophagus, at level of bifurcation of trachea, presented a large, deep ulcer with shreddy bases measuring three-quarters of an inch by one-and-a-half inches ; edges not indurated, but rather excavated, although base is thickened and a small lump of glands beneath base were enlarged and firm, and projected into left bronchus, shewing beneath the mucosa (which is intact) as a firm mass the size of a large bean. No secondary nodules elsewhere. No signs of syphilis. On microscopical examination, base of ulcer showed an epitheliomatous growth, the cells being arranged in columns and nests.

Dr. PERRIGO said he had passed a bougie down this man's œsophagus on two or three occasions, with relief to the dysphagia for a time.

Dr. MILLS said that German investigators had proved by experiments that a band of muscles of the œsophagus or intestines may be excited into contraction and remain so for a long time, like a tetanic spasm of a voluntary muscle.

Dr. SMITH said this patient came to see him about three or four months ago, complaining of difficulty in swallowing and cough. He diagnosed malignant disease, and sent him to Dr. Perrigo.

Dr. MIGNAULT said he had a patient, a nun, who has periodic attacks of dysphagia, which he was always able to relieve by a hypodermic of morphia. His patient, ten years ago, drank by mistake a strong solution of potash. He believes there is an old cicatrix in her œsophagus, which becomes irritated and sets up spasm.

Dr. CAMPBELL said that a duodenal ulcer will at times allow food to pass over it and at other times will not. He related briefly the history of a patient of his who died from hæmorrhage of an ulcer in the duodenum, in whose case these symptoms existed.

Dr. R. L. MACDONNELL read a paper entitled "*A Year's Medical Work in the Out-patient Room of the Montreal General Hospital*," in the course of which he read very many reports in brief of some of the more instructive cases he had met with during the year ending May 31st, 1884, together with remarks upon the clinical features peculiar to the cases noted, as well as to those met with in out-patient practice generally. The paper included more particularly remarks upon three cases of lead palsy, in two of which no distinct history of metallic poisoning could be traced, while in the third, colic and wrist-drop had followed the prolonged use of tinned vegetables. Two patients with locomotor ataxia had presented themselves, and one of tabes in its pre-ataxic stage, symptoms present being recurring gastric attacks, one with hæmatemesis, at first supposed to be caused by alcoholism, followed by temporary derangement of vision (Argyll-Robertson

pupil), slight numbness of the feet, and loss of knee-jerk. There was a history of syphilis in all. A case of primary lateral sclerosis of the cord, in a boy aged 12, was also described.

Fissure of the Anus—Dr. KENNEDY related a case which he was treating by passing a rectal bougie. The use of hydrochlorate of cocaine renders the operation painless.

Stated Meeting, January 9th, 1885.

T. J. ALLOWAY, M.D., First Vice-President, in The Chair.

Case of Hernia, with great hypertrophy (elephantiasis) of scrotum.—Dr T. D. REED showed photographs and gave the following account:—The patient, a French-Canadian, aged 60, applied at the Montreal Dispensary recently for treatment of œdema of left leg. On examination, he was found to have a very large pyriform tumor projecting from the pubis, reaching to within one inch of the patellæ, measuring 14½ inches in length and 30 inches in great circumference. The man had had an irreducible hernia of the right side of several years' standing, and thought the scrotum had been increasing in size for about fourteen years. The dragging of the mass, the estimated weight of which was 14 lbs., on the pubic tissues had resulted in burying the penis completely, which could be traced from a groove on the side of the tumor. Dr. Reed considered the mass to be in the upper third, hernia; in the middle hydrocele; and the lower hypertrophied scrotal tissue. There was a sinus in the solid portion from which exuded a watery fluid. The surface of this part was uneven, and the skin adherent. The patient had no difficulty with the bowels, and the belly was rotund. To urinate, the patient would elevate the mass with the hands, and pushing himself against some object, as a chair back, bring out the glans. The urine was examined for albumen, with negative result. Under treatment, the œdema of the leg diminished. Surgical interference with the tumor was refused. The patient could walk long distances at a moderate pace.

Removal of an enormous stone from the bladder.—DR. HINGSTON exhibited to the Society an enormous calculus removed by him from the bladder by the lateral method. He said his object in doing so at so late a period was in consequence of the advocacy on this and the other side of the Atlantic of the supra-pubic method for stones of large size, an operation which, even with Petersen's modification, he considered a serious one. He said the *Medical News* of Philadelphia had mentioned the removal of a stone weighing three ounces by the supra-pubic as worthy of record; and Sir Henry Thompson, in the *British Medical Journal* for July, had stated; "no incisions can be made in the region which belongs to that operation" (the lateral) "through which a calculus of three ounces or more can be extracted." The calculus Dr. Hingston exhibited weighed five ounces and five drachms when removed in July, 1873, by the lateral method. It was a somewhat flattened ellipse, and measured in breadth, 2¼ inches; length, 3⅛ inches; thickness, 1¼ inches; greatest circumference, 9 inches. It was composed of uric acid, with one end covered with a half-inch coating of phosphates. The patient, a young man, 21 years of age, made an excellent recovery, and returned to his home in Syracuse, in the State of New York.

Dr. WOOD exhibited a man with only one leg, the tibia of which, he thought, had had a piece knocked off by the man's having fallen on a shovel.

Dr. HY. HOWARD said it was difficult to be sure, as everything was healed up, and there was no other leg to compare it with.

Dr. ALLOWAY related the history of a case which he stated was of more interest from its extreme rarity than of serious importance to the patient. The patient, a young married lady, mother of two children, youngest about four years of age, consulted him about one year ago concerning a pain in her right side, backache, and general decline in health. On making a vaginal examination in Sims' position, a large cyst-like, bluish body occupied the whole of the posterior fornix space, and so overlapped the vaginal portion of the cervix and os uteri that it was with difficulty the cervix and os could be at first discovered. The cyst proved to be purely submucous, and its fluid contents separated the mucous membranes from the submucous tissues from a point extending from the os up the posterior surface of the vaginal cervix, and down a short distance on the posterior vaginal wall. At this time there was a slight catarrhal condition of the cervix, but no evidence of there having been ulceration or previous attack of pelvic inflammation. He kept the patient under observation for nine or ten months, and observing no change having taken place in the cyst during that time, concluded that it probably resulted from injury

incurred during the last confinement, and had existed ever since. From its size and position, it was quite possible for it to have acted as a bar to conception during all this time. A piece of the wall of the cyst on the cervix was removed with the scissors, and about an ounce of greenish limpid serum escaped. The fornix and vagina were packed with cotton, and the patient kept in bed for a week. There is a slight discharge of serum yet, and it may require, at some future time brushing over internally with iodine or other irritant to complete the obliteration. The abnormal symptoms complained of at the time by the patient have disappeared. Dr. Alloway exhibited a diagram showing the position of the growth, and said he had never met with a like condition, nor had he been able to find such an one recorded.

Stated Meeting, January 23rd, 1885.

T. J. ALLOWAY, M.D., First Vice-President, in the Chair.

PATHOLOGICAL SPECIMENS.

Broncholiths.—Dr. SMITH showed two small calcareous masses about the size of half peas which had been expectorated by an old man having senile catarrh. He has been expectorating four or five of these daily for the past eight or ten years.

Dr. BELL said he thought these little masses may have come from calcareous bronchial glands similar to some he has met with in the post-mortem room of the General Hospital.

Large Tonsillary Calculus.—Dr. SMITH removed this from a boy aged 10 years. It weighed forty grains and measured 2 by 1¾ inches.

Dr. BELL said he had removed a calculus from Wharton's duct which had caused so much inflammation as to mislead some other doctors into believing the patient had malignant disease.

Uterus with Fibroid Tumor; Tait's Operation.—Dr. TRENHOLME exhibited the specimen and related the case. The uterus was removed, post-mortem, from a woman aged 30, upon whom he had performed Tait's operation on the 7th of this month. She had suffered for years with pain on the left side and dysmenorrhœa in spite of all treatment. An examination revealed a uterine fibroid of the left side, with an enlarged ovary, and the parts about were thickened. Before the anæsthetic was administered a hypodermic injection of 1-6 grain of morphia and 1-1000 of atropine was given. The operation was a difficult one. There was an inch and a quarter of adipose tissue before the sheath of the rectus was reached. When the hand was got in, a membrane was felt, which was perforated by the fingers. The right ovary, twice its natural size, was first removed along with the tube. It was much more difficult to get the left into view. It was removed (not enlarged) with but the fimbriated end of the tube. There was smart hemorrhage, which was, after a time, controlled, and the wound brought together. Peritonitis set in twelve hours after. In forty hours it was thought there might be fluid, so the wound, which had healed completely, was opened, when five or six drachms of pus escaped. The wound was left open and the pulse improved for a time, but she died 76 hours after the operation. She had urinated naturally, but there had been no escape of flatus. She died from peritonitis and septicæmia. Drs. Armstrong, Wood and J. J. Gardner were present at the post-mortem. The uterus was found anteflected, and on its left cornu was a small fibroid tumor.

Dr. J. J. GARDNER, who performed the post-mortem, said there were the signs of a general peritonitis; pus was all over the intestines. Both sides of the omentum were adherent to Poupart's ligament. The perforation made by Dr. Trenholme was seen.

Dr. CAMERON, who assisted Dr. Trenholme, said there were present evidences of previous inflammation, and that a great deal of handling and forcing were needed. The situation of the tumor and the adhesions made it difficult to sponge all the blood out. The fibroid tumor, from its situation, made it at first appear as if they had a double uterus to deal with.

Dr. STEWART asked why a drainage tube was not used.

Dr. TRENHOLME said he had never yet used one. He would have used it in this case, but thought it was not needed.

Dr. STEWART said it was the practice for surgeons who do not use full antiseptic precautions to use a drainage tube. This patient died from suppurative peritonitis.

Dr. HY. HOWARD asked if a surgeon would not be justified in staying his hand from proceeding further when so much difficulty and danger presented themselves.

Dr. WM. GARDNER said that if adhesions con-

traindicted operation, only about half the cases operated on would be attempted.

Dr. Alloway remarked that this case showed how difficult it was to prevent sepsis in cases where old inflammations existed. The symptoms here tally with Emmet's views, viz, that the dysmenorrhœa is due to a parametritis.

Ovarian Cysts from a case of Double Ovariotomy.—Dr. Gardner exhibited the sacs of the two cysts removed by him from a woman aged 31, unmarried. They were of slow growth and began on the right side. The only distress had been pelvic pain. The right side of the abdomen was distended to about the size of an adult's head. The left tumor was the size of an orange, and the uterus lay between them. The first cyst was easily managed. It was much more difficult to get at the second, as it lay below and behind the uterus in Douglas' fossa, and was adherent to the uterus. It burst, and the contents being a tarlike fluid it was not easy to remove it all. Warm carbolic acid solution was used, but did not dissolve it. The fluid in both cysts was of a dark-brown color, from old hæmorrhages into them. A glass drainage tube was used. Patient died the third day of peritonitis. No pus escaped till the very last. About two ounces of bloody serum came away each day. The operation was performed under strict antiseptic precautions. It is the experience of all that long operations are very fatal. Sir Spencer Wells' percentage of deaths in double ovariotomies is 34.15. Mr. Lawson Tait's figures give a better shewing.

Dr. Alloway exhibited a *decidual cast of the uterus about twenty days old.* The points of interest where the distinctness with which the embryo-formation could be seen through the membranes, and the formation of the decidua reflexa as it arched over the ovum-sac, but which had not been quite completed, leaving a transparent facet looking towards the interior of the uterus and through the membranous walls of which the embryonic cell formation could be distinctly seen. Dr. Alloway drew attention to the evidence this specimen bore towards the correctness of Costa's views in regard to the formation of the decidua reflexa.

A LOCAL ANÆSTHETIC.

Dr. Lapthorn Smith read a paper on the use of a mixture of about equal parts of chloral hydrate and camphor as a local anæsthetic. He stated that when placed in the solid form together in a bottle they soon produced a clear, thick liquid, which, when applied on a piece of lint, covered with oil silk, to a painful surface, complete analgesia resulted. He reported three cases in which he tried it with good success. The first was a whitlow of the finger, which the patient refused to have opened. Shortly after applying it the pain disappeared, and three days later it was lanced and the pus let out without the patient, a young lady, experiencing any pain whatever. The second case was a very painful bubo, which completely disabled the patient, a gentleman, from doing his work. The mixture of chloral hydrate and camphor was applied frequently on a piece of lint, with the result that a few hours after the first application he was so much relieved that he returned to his duties next day, and fluctuation becoming evident a few days later, it was opened, the operation causing only about a quarter of the usual amount of pain. The third case was an operation for the removal of a large sebaceous cyst of the face, which was removed after the frequent application of the local anæsthetic for several hours previously by means of a brush.

The incision in the skin was almost painless, but it produced no effect upon the deeper structures to which the cyst was firmly adherent. The action of the anæsthetic is much less marked on healthy than on inflamed and painful skin.

Dr. Reed was familiar with the compound. G. E. Saunders of Montreal had shown that this is a simple mixture of the ingredients, and not a true chemical compound. Dr. Reed would suggest the solution in chloroform as a topical application.

Dr. Stewart had used a mixture of chloral and camphor for neuralgia, but now uses menthol.

Dr. Gurd has found an ointment made by mixing half a drachm each of camphor and chloral hydrate to one ounce of lard of great benefit in pruritus.

Correspondence.

OUR NEW YORK LETTER.

A VISIT TO BLACKWELL'S ISLAND. THE LYING-IN HOSPITAL.

Sir,—Would your readers like to go with me to Blackwell's Island? If so, we will take the little boat called the *Wickham*, at the foot of East 52nd St., and land at the home of the pregnant, the abode of those whose sins have wrought their misery, (those affected with venereal disease), the place reserved for those who have violated the civil

code of ethics (the work house), the insane asylum and the pest house for smallpox, etc. I will spare you the visit to the last, and waive the visit to the work house and asylum until another time.

As we enter the obstetric wards we see a very much crowded but clean place, where women are admitted after the 4th month of gestation. Here their urine is examined from time to time and their general health attended to. As they near the time for labor an examination is made by touch and auscultation of fœtal heart to make out, if possible, the position of the fœtus. When labor has actually begun the woman is removed to a solitary ward in a solitary cottage; she is placed in a cot; her abdomen, thighs and external genitals are bathed in a 1 to 2000 solution of corrosive sublimate, her labor, if normal, is allowed to proceed until the head begins to press upon the perineum, when chloroform is invariably administered and the head delivered, between pains if possible. Ergotine is then administered, an assistant compresses the womb over the abdomen, and if the placenta be not delivered spontaneously in twenty minutes, he, by external manipulation, assists in its delivery.

If the introduction of the hand into the uterus were, for any reason, necessary, disinfected though it be, the organ is washed out with the corrosive sublimate solution by means of a fountain syringe. I will say here, however, that their last rule, although not expunged from the written regulations which govern the ward, is frequently transgressed, from the fact that several cases of salivation have occurred from the procedure. If, however, no such introduction of the hand has been resorted to, or if instruments have not been necessary, a piece of lint moistened with corrosive sublimate solution is placed over the vulva, over that a piece of oiled silk, and then oakum wrapped in a napkin is applied, so that it will absorb the discharge. This napkin is attached to the bandage and changed three times a day. Half a teaspoonful of fluid extract of ergot is given three times a day for a week, otherwise no interference is made if the discharge remains odorless and the temperature normal. If any signs of septicæmia develop the uterus is washed out with a solution of carbolic acid, using the fountain syringe and a single catheter. These injections are repeated every 3 or 4 hours until all septic symptoms have disappeared. Peritonitis is treated by morphia, and the application of the coil through which iced water passes. If at the end of nine days the woman is doing well she is returned to the ward from which she came, where she remains in bed another week. The cottages in which the woman is placed after confinement have beds for five or six patients. These cottages are disinfected every two weeks; they are closed air tight and ten pounds of sulphur are burnt in each. After twenty-four hours they are fit for use.

I give these bare facts without any comments, more than to say that they about represent the status of the profession in this city at the present time, in this particular. And when I tell you that they have reduced the death rate (which has been as high as 15 per cent.) to almost nothing you cannot doubt but that there is *something* in obstetric antisepsis.

We will now pass into the venereal ward, not, however, so much for the purpose of learning the signs, symptoms and pathology of venereal diseases (for there has been little change in the teaching on those points), as to acquire a knowledge of the latest and most approved methods of treatment. As far as I can learn, more importance is attached to irrigation of the urethra than to any other remedy for gonorrhœa. A bottle containing a gallon of warm water is placed near and slightly above the patient. A catheter (about No. 6 in size) is introduced to the membranous portion of the urethra. To this instrument a tube passing from the faucet of the bottle is attached, and the water is allowed to run *ad libitum*. I think that the longer this is kept up and the oftener it is performed the more sure and speedy will be the cure. Chancroids are, as of yore, cauterized and dressed with iodoform. The chancre of syphilis is simply kept clean and dusted with calomel, and if the sore heals kindly no internal remedies, save such as might be indicated to put the patient's system in good condition to resist the disease, are used until other symptoms present themselves, and then the favorite remedy is the famous "pil. duo" which consists of one grain of sulphate of iron and two of blue mass, given three times a day. When, again, these symptoms have subsided the medicine is dropped. To make a long story short, instead of two years of mercury the symptoms alone are treated. There is much logic in this plan of dealing with syphilis, but all will admit that it is easier to carry it out in hospital than in private practice, especially when it is known that the much-dreaded rash may be prevented or masked by continuous treatment from the date of the initial lesion.

Blackwell's Island is well designed by nature for the purposes for which it is employed. The

winds and the waves are nature's best scavengers. In my next letter, although I shall probably date it among the fogs of the English metropolis, I shall try to give you an idea of the treatment of wounds, surgical and accidental, as carried out by the principal New York surgeons.

W. P. S.

122 East 27th St., New York.

Progress of Science.

PALATABLE PRESCRIPTIONS.

Dr. John L. Davis at a recent meeting of the Cincinnati Medical Society read an interesting practical paper, which we find in the *Lancet and Clinic* of that city. We reprint below the most important portions of the article. Dr. Davis says:

It is with the view of suggesting agreeable and appropriate vehicles for some of the most repulsive drugs that I offer the following prescriptions. They are the result of a great many experiments and most of them I have used in practice and can recommend as the best combinations possible without modifying the drug in such a way as to affect its action. I have attempted to marshal these unruly drugs under something approaching order; though I confess the classification is far from being a perfect one. A few drugs of each class will suffice to illustrate how the whole class may be improved.

1. *Bitter Drugs.*— These comprise a very large class of unpalatable medicines: the climax of bitterness is reached in the cinchona bark. The best prescription for masking the taste of quinine is:

℞. Quiniæ sulphatis..... gr. xxx.
Tinct. aurant. cort. recentis..... ʒ ij.
Ext. glycyrrhizæ fl..... ..... ʒ vj.
Syr. simplicis..... ʒ j.

Or it may be given with the aromatic syrup of licorice. Simply chewing a piece of licorice root before and after taking the quinine will very effectually hide its bitter taste. The same methods for administration apply equally well to most other bitter medicines. In the *American Journal of Medical Science*, Dr. Samuel Ashhurst of Philadelphia describes an agreeable method for the exhibition of cinchonia. He uses the alkaloid rather than the more usual sulphate; for, while being equally soluble in the stomach, it is less so in the saliva, and consequently its bitterness is less marked than that of the sulphate. His prescription is:

℞. Cinchoniæ..... .....gr. j.
Sac lactis..... .....gr. iv.
Sodæ bicarbonatis.....gr. v.

The soda renders the alkaloid less soluble in the mouth, while the sugar of the milk gives it an agreeable, sweet taste. Children take this powder without the least aversion.

The thick, viscid elixir of taraxacum is also a valuable vehicle for the administration of medicines. And finally it may be said of these, as of all medicines, that if taken very cold, or if a piece of ice is taken into the mouth immediately before the medicine, the objectionable taste will be less marked.

2. *Salty and metallic drugs.*—A large class of unpalatable drugs is included under this head. The best prescription containing iodide of potassium is the following:

℞. Potassii iodidi..... ʒ iji.
Tinct. aurant. cort recentis..... ʒ j.
Ext. glycyrrhiz. rad. fl..... ..... ʒ j.
Syr. simplicis..... .....q. s. ad ʒ iij.

Of this each teaspoonful contains five grains, and the iodide is so perfectly disguised that persons who have been accustomed to its use fail to recognize its presence. For this combination I am indebted to Mr. Julius H. Eichberg, the skillful and efficient druggist of the Cincinnati Hospital. The vehicle is eligible also for the administration of the bromide of potassium. A syrup of coffee is highly recommended to hide the taste of the iodide—fifteen grains to the ounce. The same vehicle can be used for the bromide, except in cases where the stimulant effect of coffee is to be avoided.

A simple and somewhat effective way for administering the iodide and bromide, as well as salicylic acid, is in milk—ten grains to the ounce. Another mode for giving these drugs is to use as the vehicle slightly alkaline carbonated water, either natural or artificial.

The syrup of the iodide of iron is a useful medicine, which is best given simply with the fluid extract of licorice root: this is preferable to the ordinary succus glycyrrhizæ. A medicine peculiarly disagreeable to many persons from its bitter salty taste is magnesium sulphate. The following prescription offers an elegant means for its administration:

℞. Magnesii sulphatis..... ʒ ij.
Acidi sulphurici.....gtt. v.
Glycerinæ.....gtt. v.
Aquæ.....q. s. ad ʒ j.

Half of this, in a glass of water constitutes an agreeable dose of an ordinarily repulsive substance. By the addition of a drop or two of mint the mixture becomes not only palatable but attractive.

3. *Astringent drugs.*—Tannin is the representative of a class of remedies repulsive by reason of an astringent, acrid taste. This may be materially improved by the addition of sugar of milk and aromatic powder. I have also ordered it with powdered licorice, which materially improves the taste. Salicylic acid may be given

in powder the same way. When alcohol is not objectionable, the following combination will be found useful and agreeable:

℞. Acidi salicylici..... .....gr. viij.
Spir. vini Gallici..... M xl.
Syr. acaciæ,
Syr. limonis.....aa. M x.

Chloral, besides having an acrid taste, is burning and penetrating; and these qualities make it a most difficult substance to disguise. I have seen some alleged palatable prescriptions of this drug, in which the only thing disguised and perfectly hidden was the aromatic vehicle, the taste of the chloral being apparently reinforced and concentrated. The best combination containing this drug is a suggestion of Mr. Eichberg. It is thus:

℞. Chloral hydratis.....gr. v.
Glycerinæ..... ... ʒ j.

Or, it may be still furthur improved thus.

℞. Chloral hydratis.....gr. xx.
Glycerinæ..... ʒ ij.
Ext. glycyrrhyz. rad. fl. . ...ʒ j.

Each drachm of which contains six and two-thirds grains of chloral. These same vehicles may be used in giving croton chloral hydrate, a remedy which is remarkably beneficial in some cases of facial neuralgia.

Another convenient and agreeable vehicle is syrup of raspberry, a drachm of which covers the taste of three or four grains of chloral.

4. *Ethereal drugs.*—The syrup of raspberry is also valuable to conceal the disagreeable character of sweet spirits of nitre; when taken with this syrup in soda water, the drug is not tasted.

Sulphuric ether is best given on a lump of sugar; chloroform has a hot, burning taste, which is best modified by an emulsion; or it may be given with a large quantity of simple elixir.

5. *Odorous drugs.*—A certain class of drugs is disagreeable more from odor than from taste. Such are carbolic acid and creasote, very repulsive to some persons. The unpleasant character of the former is fairly hidden by simple elixir, five grains of the acid to the ounce. The best way to give creasote is with simple elixir or syrup and Madeira wine.

Iodoform has a very objectionable odor, and one method for disguising it is the addition of tan. .. The compound has a less disagreeable od han iodoform, but this improvement is by destroying the iodoform by the formation different substance. Such prescriptions of ere improper. The offensive odor may be ed by the addition of various substances, ut affecting in the slightest the physiological n of the drug. The best combinations are ollowing:

℞. Iodoformi..... .... ʒ j.
Nitrobenzol.....gtt. iij.

℞. Iodoformi..... ʒ j.
Ol. myristicæ.....gtt. ij.

℞ Iodoformi..... ʒ j.
Eucalyptol .....gtt. iv.

All of these prescriptions are excellent; the disagreeable odor is perfectly removed; while the properties of the iodoform remain unaltered. Some samples of these combinations prepared two years ago show as yet no trace of the odor of iodoform, though the activity of the drug is unimpaired. The odor may also be hidden, though less effectually, by oleum myrciæ (oil of bay) and tonka bean, or its active principle, coumarine.

Nitrobenzol constitutes an agreeable cover for the odor of turpentine. The following is a prescription which I have used:

℞ Ol. terebinthinæ..... M x.
Mucilage acaciæ syrupi..... .... m xxv.
Nitrobenzol .....gtt. j.

In some cases turpentine may be best given in pill form. And the same may be said of many of the resins and gums.

Assafœtida is a substance which the Persians use as a condiment, to give their food a pleasant taste. Personally I should prefer to take it in a gelatine-coated pill, which is the least disagreeable method for its administration.

Given in liquid form, it is an exceedingly repulsive drug, whose odor and taste cannot be effectually covered. By the addition to the tincture of a drop or two of oil of orange, and a few drops of aromatic sulphuric acid, its nauseousness becomes slightly less obtrusive. This is somewhat preferable—if there can be a choice in repulsive things—to the ordinary emulsions and mixtures containing licorice, tincture of orange, mint, etc.

Ipecac has a repulsive, acrid taste, even as syrup. If, however, instead of sugar, glycerine is used in making the syrupy mixture, the objectionable features are materially improved.

6. *Oils.*—Such oils as that of copaiba are best given in capsule. But some persons are so constituted as to be unable to swallow capsules, and for such our only refuge is found in emulsions, such as that of bitter almonds flavored with an essential oil.

Castor oil is most easily given with an equal amount of glycerine, and a drop of oil of cinnamon to the ounce. The oil is not recognizable, and the mixture has only the hot, sweet taste of glycerine, agreeably modified by cinnamon. This is the best way to give this valuable medicine to children. It is also readily taken by children when mixed with coarse brown sugar, and having the mass made firm by placing it for a few minutes on ice (*Berl. Klin. Wocheg.*)

A method for its exhibition suggested by Dr. Potain (*Le Practicien*) appears to answer the purpose. A spoonful of orange juice is poured into a cup, then the oil is added, and finally another spoonful of orange juice. When swallowed the presence of the oil is completely unrecognizable.

The following elaborate prescription has been

suggested: In a tumbler pour six drachms syrup of sarsaparilla, then add ten grains of bicarbonate of soda, and stir. Add then one fluid drachm of a saturated solution of tartaric acid; the reaction will cause a heavy, viscid froth. Then pour an ounce of water gently down the side of the glass, so it will reach the bottom with the least disturbance of the other ingredients. Finally, the oil is to be added without agitation, and the mixture taken. It is undoubtedly perfectly palatable, but its preparation demands an unreasonable amount of work, and it is not practicable. Another very palatable mixture is open to the same objection:

℞. Ol. ricini ..... ʒ j.
Ol. anisi,
Chloroformi..... aa gtt. x.
Shake, and add mucilcg. acaciæ. ʒ ss.
Shake again, and add water..... ʒ ss.

By far the simplest and most eligible palatable prescription containing castor oil is that made with the addition of glycerine, with or without cinnamon.

A very nauseating and unpalatable medicine is cod liver oil. Many attempts have been made to cover its taste. One of the easiest methods for its administration is with the yellow of an egg, a drop or two of an essential oil, and half a glass of sweetened water; or it may be given with glycerine and whiskey, or glycerine and compound spirits of lavender. The oil may be much modified, and, to some tastes, improved, by the addition of ten drops of the tincture of eucalyptus globulus to the ounce.

The following method for making a palatable preparation is worthy of consideration and investigation; I have not tried it, but the theory appears plausible:

Take of Cod liver oil	..1,000	parts.
Coffee.....	50	"
Animal charcoal.....	25	"

Place in a well-closed flask, and digest on a water-bath for one hour. Set aside for three days, occasionally shaking; then filter. The oil is then said to have an agreeable coffee flavor and a pleasant odor. (Carlo Pavesi.)

The medicines I have mentioned are those ordinarily most difficult to administer. I have spoken of them as we have them, without attempting any other improvement than can be made by the addition of various substances. But in most instances our medicines may be made still more agreeable by concentration, and by the use of the active principles, as the alkaloids of drugs.

And in some diseases, too, it will be found that medicine may be made not any less discomforting to the patient, but of greater benefit, by giving it in smaller doses than are now common, though more frequently repeated.

A CLINICAL LECTURE ON REMEDIES FOR ASTHMA.

Delivered at the City of London Hospital for Diseases of the Chest.

By JOHN C. THOROWOOD, M.D., F.R.C.P.,
Senior Physician to the Hospital.

As a matter of observation and experience I find that persons, from the high to the low, are disposed to regard asthma as a complaint to be endured rather than cured. In support of this statement I can bring forward the sayings of paupers in the workhouse, and of more favored people enjoying time-honored titles and living in the best parts of London. Reflect, however—Are we worse off in our chances of curing asthma than we are in respect of many other chronic diseases? Is epilepsy often cured? Then gout again—"Strange thing," people sometimes say, "but the doctors can find no cure for gout." Pulmonary consumption is not so curable as we could wish, and there are, to my present knowledge, cases of skin diseases that baffle all the best therapeutic talent in London and many other large towns. The curative action of drugs is more critically tested in chronic than in acute disease. Diseases of an acute type, such as pneumonia, measles, &c., usually tend to a natural recovery, while with chronic disease the tendency is just the other way. Chronic disease slowly grows, as it were, into the very constitution of the patient, so that the disease appears to become a part of his very being, and he gets to regard it as his companion for life, accepting gratefully such remissions as circumstances or the art of the doctor may from time to time obtain for him.

Spasmodic asthma, though by no means a dangerous disorder, is cruel in the way it deals with its victims. Asthmatics are usually persons of ability and strong nervous energy, and often in the midst of daily and successful work, are seized upon by the asthma, and after a hard day's work the sufferer has to pass a night sitting up in bed, gasping for breath, and inhaling all manner of smoke and vapor in order to obtain ease for his respiration. In the morning generally the spasm remits, and then comes the routine of daily work after the preparation of such a night as that I have portrayed.

Therapeutic experiences in asthma can be obtained in an interesting form from the life-histories of some of the physicians of years long passed away. Floyer, who wrote on asthma in 1717, and who seems to me to have known almost as much of the mechanism and nature of the complaint as we do now, was a great sufferer. His medicines were chiefly of the evacuant class; of anti-spasmodics he does not appear to have had a very high opinion. General Gent, on the other hand, who in 1802 introduced the use of stramonium smoke as a means of relief for his asthma, believed in its anti-spasmodic power as formerly, and resorted

to it so freely that he is said to have fallen a victim to the excessive use of his favorite remedy.

An intimate knowledge of pathology does not appear necessary or essential to guide us to a selection of a remedy for asthma. When we review the large number of remedies that find and maintain a good repute with the public for the relief of the asthmatic fit, such as Himrod's powder, Joy's cigarettes, the ozone paper of Huggins, and the like, we do not find the inventors of these much-prized remedies to have been men distinguished in pathological research. Nevertheless, it will help us in choosing a medicine to bear in mind that asthma is a spasm of the bronchial muscles which surround the smaller air tubes, with simultaneous congestion of the bronchial mucous membrane. The expiratory character of the dyspnœa in the case of old asthmatics with rounded chests should also be borne in mind. Very often such a patient will volunteer the statement that the difficulty is to get the air out of, not into, the chest. Sometimes we see spasmodic asthma coming distinctly as a secondary affection upon bronchitis. This may be called bronchitic asthma. I briefly indicate these distinctions, inasmuch as they bear on the matter of remedies for asthma with which our present purpose lies. The climatic treatment of spasmodic asthma can be soon disposed of in the purely spasmodic form of the complaint where the patient goes to bed in excellent health, and then is taken about three or four in the morning with sudden constriction of the chest, so that he has to sit up with his head bent down on his knees and gasp for breath, the best advice to give is to tell him when he comes to a place in which he finds he can sleep peacefully all night to stay there, for it is notorious that the finding of a fit climate for these cases is a matter of pure experiment. Many curious tales are told of the vagaries of asthma in seizing severely on one asthmatic on the very same spot where another is rejoicing in having escaped from his harassing enemy. Dr. Birkett relates the curious case of two asthmatics, one of whom could only breathe in London, the other could only breathe at Norwood. If they attempted to go, the one to Norwood the other to London, they were stopped on the journey by asthma. And very curious they were both stopped at the same spot, which was Camberwell Green. Individuals whose asthmatic seizures are caused by or essentially associated with, irritative bronchitis, have their line of climatic treatment more definitely marked out, for I believe I am correct in saying that these cases of bronchitic asthma will do well, and find their lives lengthened and more enjoyable in a place possessing a mild and equable climate, and in air that is not dry and exciting. Torquay and Bournemouth, Ventnor and Hastings are good resorts; especially during the Autumn and Spring months. I have heard of the case of a patient who was attacked by a severe bronchitis with much spasm during a bad London fog. He got no relief till he went to St. Leonards. While there he coughed up much dark sooty-colored expectoration and recovery went on rapidly. The soothing air of St. Leonard's relieved the spasmodic state of the bronchial muscles; they were enabled to act rhythmically and so to clear the lungs of all the foulness of the London air that was clogging and oppressing them.

When we seek to relieve the urgent dyspnœa of asthma by inhalations, we generally use substances that have been found to act locally as relaxors of spasm. Chloroform cautiously employed is pre-eminently useful in giving prompt relief to the asthmatic fit. It is superior to and less dangerous than the nitrite of amyl, but the danger is that the patient becomes too fond of the chloroform, for the way in which I have known chloroform consumed by asthmatic men and women, has more than once caused me real alarm and apprehension. If nitrite of amyl be employed two or three drops should be inhaled from lint, and if the breathing be noted to become slower and deeper it will be a sign that the inhalation is likely to relieve before long.

Iodide of ethyl, or iodic ether was introduced as a remedy for asthma in 1870, by Mr. Huette, Our experience of its use in spasmodic asthma at this hospital has been favorable. Six or eight drops of the iodic ether may be inhaled from a piece of lint held on the palm of the hand. A former clinical assistant, Mr. MacDonald, was able to detect the presence of iodine in the expectoration, and also in the urine of those who had inhaled the iodic ether. In the dyspnœa met with in fibroid phthisis, and in old-standing bronchitis the iodic ether certainly is beneficial.

In the case of Annie E., æt. 16, from Tunbridge Wells, we found the sudden attacks of asthma to be decidedly relieved, and the frequency of their recurrence diminished, by the inhalation of ten drops of iodic ether as soon as the breath difficulty commenced. The cough was also relieved, and expectoration facilitated. The note speaks of nitrate of pilocarpine, gr. 1-24th, lobelia, and citrate of caffeine, given internally, not appearing to afford an amount of relief equal to that obtained from the iodide of ethyl.

Burning nitre paper fumes are so well known as a time-honored remedy for the asthmatic fit that I need say but little on the subject. The more sudden and spasmodic the attack the greater is the chance of relief from the nitrous fumes; and these must be furnished abundantly till the atmosphere becomes unbearable to a person whose lungs are healthy, for then it is that the asthmatic sucks in the medicated air with comfort and relief. Analysis of the nitrous vapor has proved in it the presence of cyanogen, nitrogen, carbonic acid and ammonia; whether the specific action of the paper when burnt is due to one of these bodies more than another I cannot say.

The nitre paper has been medicated in various ways and the addition of some iodide of potassium as in the ozone paper of Huggins is an advantage.

In cases of bronchitic asthma where there is some amount of actual bronchitis present in the air tubes, burning nitre paper often aggravates the distress of the patient. It is in these cases where iodic ether answers much better than the nitrous fume, and where preparations of arsenious acid or phosphorus internally are very effectual remedies. Of anti-spasmodic powders and cigarettes for inhalation there is an endless variety known to most of those present. Slade's stramonium cigarettes, and Savory and Moore's datura tatula cigarettes and powder, answer well in cases where there is much spasm and great inspiratory dyspnœa, as if the lung was closed and wanted opening. Belladonna and lobelia powders are also valuable anti-spasmodics. The celebrated Himrod's powder, so much used for asthma, does not seem to contain stramonium, probably it contains belladonna. The objection to these fuming powders and cigarettes is the dryness of the throat and headache, which so commonly follow their employment.

Of internal remedies I am bound to speak well of caffeine, usually, given in the form of what is known as citrate of caffeine, though chemists say there is no definite combination between the citric acid and the caffeine. Dr. Fowler, of Wakefield, first drew my attention to this citrate of caffeine, in 1878 on account of its marvelously curative action in his own case after the failure of an immense number of remedies The citrate is best given in dose of 1 to 5 grains dissolved in warm coffee, and it very seldom fails to give relief to the asthmatic paroxysm. We want more investigation as to the mode of action of caffeine. M. Leblond says it regulates the heart, augments its force, promotes diuresis, and is safer and more certain in action than digitalis. In poisonous dose it is said to paralyse the medulla. While I find much said in English and French works on the value of caffeine in cardiac dropsy, I do not find anywhere mention made of its great power in relieving asthma. (*a*) I have heard of as much as sixty grains of citrate of caffeine, taken by mistake, producing muscular tremors, vomiting, and rather alarming symptoms, which were relieved by digitalis. The only case in which I have actually seen serious symptoms, follow on the use of caffeine was in the case of a young medical man, who had severe attacks of dyspnœa, resembling asthma. To him I gave one grain of citrate of caffeine, the effect was at once to relieve his breathing, and he was rejoiced at the speedy action of the medicine; but soon there came on a most deadly faintness, from which he was with difficulty restored. At the time one could not help thinking the caffeine might have been the cause of this faintness, but more extended observation of this case showed me that without warning very alarming fits of syncope at times attacked this patient, and I heard that he eventually died in one of these seizures. The case was one of those that now and then come under notice as cases of asthma, but which are really indications of profound nervous lesion. Curious to say that three cases of nervous dyspnœa that have thus come under my notice have all been in the cases of medical men. Two died and one is yet alive, but hemiplegic on his right side.

The second edition of Dr. Hyde Salter's work on asthma was published in 1868, and I have vainly looked in it for mention of arsenious acid as a remedy for asthma. In 1869, among out-patients at this hospital, I accomplished some striking and durable cures of bronchitic asthma by means of arsenic in the form of 2 or 3 minims of Fowler's solution. Arsenical preparations give vigor and support to the respiration, and enable people to ascend mountains without confessing the toil by a single sigh; hence one judges that in many forms of asthma arsenical medicines may prove advantageous.

One case taken from several will give the indications for arsenic. Feb. 12, 1883.—C. W., æt. 14, has been asthmatic from the age of 2 years. He coughs violently, and when the asthma takes him his lower chest is drawn in. Tongue large, throat congested. Pulse 88. Respiration harsh and loud. Heart normal. At Kimberley, near the Orange River, he was quite free from asthma. He was ordered twice daily 2 minims of Fowler's solution with 2 grains of iodide of potassium in water. On March 19th I heard that he had not required any medicine for the last fourteen days, and seemed perfectly cured. The liquor sodæ arseniatis is a preparation that may be given with much hopefulness in bronchial and bronchitic asthma. I have never seen any unpleasant effects follow on the employment of arsenic, but when there is hæmoptysis and weakness of the heart I have found it fail to give relief. I wish time would allow me to enlarge upon the effects of arsenic eating, for they are curious. At Salzburg Arsenic Works the men who stand the fumes best eat arsenic daily with their food. A gentlemen who came to learn assaying at the age of 17 years was advised to eat a bit of arsenious acid every day to enable him to bear the exposure to the vapor. He continued the practice up to the age of 50. "Twice (said he) I tried to give up my arsenic, but on each occasion I experienced faintness, sweating, loss of sleep, and violent palpitation of the heart. Inflammation of the lungs followed; I was laid up for nine weeks, and should have died had I not returned to my arsenic." Arsenic-smoking in a pipe is known as the Chinese remedy for asthma. Cauvin (*Lancet*, 1861), reports the case of an asthmatic lady, who in an experience of twenty-five years found no remedy equal to $\frac{1}{4}$ of a grain of arsenious acid three or four times a day, mixed in a stramonium cigarette.

I pass over many remedies for asthma, well known to most, to mention a new one that we have recently been employing—the Euphorbia Pilulifera from Australia. A decoction of the dried plant is made in the proportion of $\frac{1}{2}$ oz. to Oj. of water

(*a*) "Medical Society's Proceedings," Vol. VI., 405.

and when cool 100 mm. of spirit of chloroform are added. Of this decoction the patient takes a wineglassful three times in the day. When it does not agree you may expect depression and faintness to show themselves. In bronchitic asthma, with emphysematous lungs, the euphorbia seems of some service. I have notes of four cases in which we have tried it. In the case of Georgina M., æt. 20, living in London, and for three months an in-patient at the Middlesex Hospital on account of extremely severe paroxysms of asthma, with tendency to congestion of lungs, we found, for a time, the euphorbia of service, while caffeine, belladonna, and an immense number of other medicines, including iodide of potassium in 15-grain doses, had no curative effect whatever. Emily K., æt. 32, from a marshy part of Essex, was twice in Victoria Park Hospital for bronchitic asthma, with occasional paroxysms of severe dyspnœa, when she turns livid in the face. The euphorbia certainly answered well here. It kept off the asthma, while the cough and mucopurulent expectoration diminished under its employment. It did more good than any other medicine, and she left the hospital on December 29, 1883, very much relieved.

James B., æt., 40, with bronchitic asthma and tendency to congestion of lungs, was admitted October, 1873. He said he had taken every remedy that he had seen advertised for the cure of asthma. Euphorbia suited him and gave relief, he did not seem equal to a combination of iodide of potassium and carbonate ammonium. His asthma and bronchitis were of nine years' duration, due to cold taken in his employment as a coachman.

There are cases, met with in persons advanced in years, where the chest is round and barrel-shaped; it is extra resonant on percussion, and this resonance extends very low down in the chest, giving the impression that the diaphragm does not move up and down as it ought to do. The diaphragm is mechanically pressed downwards by the over-distended lungs, and cannot rise to attain its proper position in expiration. A line or zone of congested capillary vessels can sometimes be traced on the skin along the line of attachment of the diaphragm. It is in very confirmed cases that I have noticed this sign present.

On auscultation we scarcely hear any inspiratory sound. The lungs are so distended that but little air can be taken in with inspiration. With this stagnant condition of respiration the patient complains much of coldness in his extremities, his lips and nose look dark and congested, and his general condition is one of dulness and apathy. At intervals the bronchial muscle is thrown into a state of rigid spasm, and thus attacks of asthma come on, and greatly distress the patient. Ordinary expectorants and sedatives are of very little use as remedies in this form of asthma, but I have seen much good done by liquor strychniæ or pills of extract of nux vomica. The liquor may be given in doses of three to five drops, with dilute phosphoric or hydrochloric acid. In cases where respiration is much prolonged, and expectoration of phlegm difficult, I have seen much good done by the strychnia and the nux vomica.

In the case of a patient lately under my care with barrel-shaped, almost circular, chest and frequent asthmatic seizures, we were able, in consultation with Dr. Cayley, to try the effect of the inspiration of compressed air from Waldenberg's spirometer. The benefit was slight, and the trial of expiration into rarefied air of no benefit whatever. Subsequently I learned that the inspiration of oxygen gas had proved useful; but what did more good than anything else was going through a course of severe manipulation at the hands of a celebrated Swedish practitioner. The abdominal muscles were well rubbed and shampooed, and thus their action as muscles of expiration was roused and stimulated. The diaphragm also powerfully brought into play, with the result of curing the asthmatic seizures and bringing improved appetite and increased vigor to the circulation, so that the patient felt warm and cheerful.

Of the treatment of hay asthma and summer catarrh I have not much to say. The pollen of grasses and of flowers appears to be the cause of this complaint, and various respirators have been invented to protect the nostrils against the invasion of the pollen. A snuff, made by rubbing well together twenty or thirty grains of iodide of sulphur and 200 grains of powdered liquorice root, has seemed to me decidedly of service in some cases. The powder must be made as fine and impalpable as possible, and then a little of it may be snuffed into the nostrils. Gargling the throat and bathing the nostrils and eyes with a very weak solution of potassium permanganate in water is often very comforting. It is well to commence with five drops of the BP solution of the permanganate in a tumblerful of water, and the strength can be increased by degrees.

Of internal remedies I believe belladonna to be the best when the defluxion from the mucous surfaces is very profuse and distressing. From three to six mm. of the succus belladonnæ should be taken in water every four hours, and such experience as I have had of this remedy has been certainly encouraging.

THE NEW SPECIFIC FOR RHEUMATISM.

The New York *Medical Journal* publishes a paper by Dr. H. H. Seelye, of Amherst, Massachusetts, on the use of the oil of gaultheria in the treatment of the various types of rheumatism, the observations having been made in three of the wards of a large hospital where special advantages were offered for testing the merits of the drug.

The medicine can be administered in various ways, the most agreeable being in capsules, either alone or mixed with salicylate of sodium, or in soda-water as a flavoring. We gave it in an emulsion of ten minims of the oil to half a dram each of glycerine and water. If the patient had been

sick for some time, and the inflammation of the joints was extensive, we usually ordered two drams of this mixture every two hours during the day and every three hours throughout the night. Under this treatment almost invariably within twelve hours the patient would express great relief, and by the end of twenty-four hours the pain and swelling would have left all the joints, except, perhaps, a little in some one articulation, and there would only remain a slight stiffness of the previously inflamed parts, due probably to the distension of the adjacent tissues by reason of the swelling, which had now disappeared. Before or about this time, however, the patient would generally complain of some ringing in the ears and deafness, similar to that produced by large doses of quinine. but usually not so markedly annoying in character, and he would be apt to have some headache or a sensation of fullness in the head. These symptoms occurring synchronously with the cessation of pain, tenderness, and swelling from the joints, and with a sudden fall of temperature to the normal, were generally considered an indication for diminishing the dose of the medicine and it was therefore usually reduced to one dram every three or four hours, according to the relative amount of the cerebral and joint disturbance. If too much of the medicine was still given, its evil effects became more marked. The patient would now experience a loathing of the drug; nausea and vomiting would set in; the deafness, tinnitus aurium, and headache would increase; the muscles of the hands, limbs, and face would become tremulous; the countenance would be flushed, and the whole body be bathed in a profuse perspiration; and at length the patient would become delirious. These extreme symptoms, more or less modified, were observed by us in perhaps eight or ten cases of acute articular rheumatism, but they almost invariably occurred in patients who had been hard drinkers, and in whom the attack of rheumatism was most probably due to some unusual exposure to cold or wet while in a state of intoxication. In the large majority of cases only a little ringing in the ears was complained of, and this would soon cease upon the diminution or complete withdrawal of the drug. There were also very many cases in which no evil results were ever manifested, but the patient speedily recovered without experiencing any annoyance.

There would always be a certain number of cases which would yield promptly to the remedy, so far as relieving the acute suffering, reducing the inflammatory swelling, and lowering the temperature were concerned, but still a little pain on motion, or a slight stiffness, would hang about some one joint, usually the shoulder, wrist, finger, or ankle, and it would be several days longer before the patient could say that he was perfectly free from pain and felt well. Again, there would be comparatively few patients who, after being speedily relieved, would be up and moving about the ward for some days without taking any of the medicine, and then there would come a sudden relapse, and the pains would return, though with less severity, in one or two joints. But here a renewal of the remedy usually induced a rapid recovery. In order to guard against such relapses and to be sure that the cure was permanent, it was our custom to keep the patient in bed and to continue the medicine in smaller and less frequent doses for at least two days after all symptoms of the disease had disappeared, then to retain him in the ward for two or three days longer without giving him any medicine but tonics, and then, if there was no return of the symptoms, to discharge him, cured. In a very large majority of cases the patients themselves asked, about this time, to be discharged, because they felt so perfectly well.

The one variety of rheumatism in which this remedy was found to be most efficient and rapid as well as permanent in its action, is what is commonly known as acute articular rheumatism; the more acute the attack, the more joints are involved, the more inflamed and swollen they are, and the higher the temperature, so much the more speedy and complete is the cure apt to be. It is, in fact, in these worst of all cases that the remedial power of this drug is most wonderful to see. Yet it must not be supposed that it is of insignificant value in the more subacute forms of the disease; for here too it almost invariably diminishes the severity of the suffering, and after a time often effects a radical cure.

In the chronic forms of rheumatism the action of the remedy seems to be limited in most cases to merely giving prompt relief from the acute pains and swellings attending exacerbations of the malady, and for this purpose it is very efficient. But, like most other drugs, it is powerless to correct the permanent damage done to joints which have long been undergoing morbid changes in their fibrous and cartilaginous structures. The same statement is true, as a rule, in regard to those other obstinate forms of the disease known by the various names of gouty rheumatism, arthritis deformans, rheumatoid arthritis, gonorrheal and syphilitic rheumatism, etc. In the active stage of all these some temporary relief will usually be afforded, while a complete recovery under its influence is very rare.

Muscular rheumatism, lumbago, coxalgia, sciatica, and the like, seem to be variously influenced. Some patients, after the medicine is begun, experience almost immediate relief, while others do not seem to be benefited at all. As regards the frequency of cardiac complications developing under this plan of treatment, it is certain that the liability to them is not increased.

HAY FEVER.—VALER. ZINC AND ASSAFOET.

Dr. Morell Mackenzie considers pills containing one grain of valerianate of zinc and two grains of assafœtida each very valuable in hay fever.—*Med. Chron.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, MARCH, 1885.

THE BOARD OF HEALTH.

Since our last issue a new Mayor has been elected for this city. This gentleman, we are pleased to learn, has given considerable prominence to the necessity of dealing more effectually with matters affecting public health. The Board of Health has also acquired a new chairman, an appointment which we believe is endorsed by the Medical Profession. No member of the Board is better fitted to carry out intelligently the oversight of this department, and therefore we expect to see an improvement in its general management. In this connection we would mention having received from the Medical Health Officer his reports of the mortality of Montreal. From one of those reports we copy the following extracts:

"A fruitful cause of contagious diseases, and we may say of all zymotic diseases, as well as of the diseases of children, is to be found in the privy vaults, the most part of which are placed too close to dwellings, opposite doors and windows. These vaults are made of planks which become loose, and rain water readily flows into them, thus favoring the decomposition of their contents.

We know that human excreta contains a great quantity of sulphur and phosphorus, and that these two substances form, with the hydrogen of the water, sulphuretted and phosphoretted hydrogen, two very deleterious gases, the diffusion of which takes place abundantly in houses. We are aware that the stools of patients affected with contagious diseases, and especially with typhoid fever, contain a great many germs of contagion. Therefore, as long as these vaults are permitted to exist we should not be astonished at the prevalence of contagious diseases.

But it may be remarked that the contents of a great many of the vaults flow into drains. This is very true, but it is to the detriment of public health; for pits emptying into drains connect with the latter at a certain distance from the bottom, the consequence being that a large quantity of the solid part of the matter remains at the bottom, and the pits thus become an incessant cause of nuisance. The question of privy vaults is difficult to solve. During the Washington Sanitary Convention, held on the 10th December last, this question was the subject (although seeming an abject one to the eyes of the vulgar) of a very useful discussion. It was then resolved that yard privy vaults should be done away with, and the system of water closets adopted as the safest guarantee to public health. We should then consider this question with the greatest solicitude, as tending to decrease the death-rate of the city and to prolong the greatest boon we possess—life.

To solve this question in a definite manner we would suggest that:

1. That the system of water closets be adopted in every street in which public sewers exist. This measure may not be immediately put in force, but should be in the near future.

2. That all yard privy vaults be emptied and disinfected within three months from the present time, and, if possible, filled up and replaced by a system which would allow the removal of the excreta twice a week. This object can be accomplished by using the already constructed wooden privy; a tub, bucket or any other vessel, which could be easily removed, being placed under the seat."

These extracts should not be lightly passed over by the Board, although, from the apparently slight attention generally given to the Officer's reports we fear they will. The Medical Health Officer has gained the respect of his confrères for his indefatiguable exertions in improving the sanitary condition of the city, and if the Board had more often heeded his suggestions and given him an efficient support in the past very many needed reforms would now have been accomplished.

PRIVY-VAULTS.

In Professor Pepper's System of Medicine, now being published by Lea Brothers & Co., is an article upon Drainage and Sewerage by George E. Waring, jr., the accomplished engineer of sanitary drainage, at Newport, R.I. The following extract will be of interest, showing his opinion of privy-vaults.

"Privy-vaults are the sole reliance for the disposal of fœcal matter, and often of chamber slops, of 95 per cent. of the population of this country and of Europe as well. It is curious in examining the recommendations of public health officers and the requirements of local boards of health, to observe the uniformity with which this most important subject is passed over, with the prescription that the vault shall be tight, sometimes that it shall be vaulted over, and sometimes that it shall not be within a certain small number of feet of a boundary line, or of a drinking-water well. These prescriptions are most absurd. It is safe to say that of the millions of privy-vaults in this country, not more than hundreds are really tight; that a still smaller number are so vaulted over as to prevent the free exhalation of the gases of decomposition; that those which are so vaulted over are in all respects of worse sanitary effect than those which have freer communication with the air, and that their possibilities of evil reach many times farther than the limits of distance usually required to intervene between them and the well or the neighboring property. In view of the universality of their use and of the completeness with which modern communities are inured to their presence, it seems almost hopeless to attempt to secure a proper realization of their great defects. They are always the seat of the foulest and even of the most dangerous decomposition. They taint not only the air and the soil, but the water of the soil which goes so often to feed our sources of drinking water and their local stench is of itself sufficient to sicken all who have not, by daily and lifelong habit, become accustomed to it. Taking the country at large, farmhouses and village houses, as well as the dwellings of cities, it is not too much to say that the best sanitary service that can be rendered by those interested in the removal of causes of ill-health would be in securing the abolition of those barbarous domestic appliances. In many ways the cesspool is as bad as the vault, but in some respects the vault is *facile princeps* as a public and private nuisance of the most annoying and dangerous character. Wherever a public or private sewer is available, wherever disposal by irrigation is possible, and wherever even the crudest attention can be secured for an automatic or simpler earth-closet, the strongest effort should be directed to the absolute inhibition of the common privy-vault."

In another connection Mr. Waring refers to these nuisances as "the *fiendish* privy-vaults which prevail so generally." Such strong language, from a man so well qualified to speak with authority, should compel the attention of our local Board. We earnestly commend this important matter to their consideration.

The London *Engineering Times* says that: "Cholera, if it comes to us next summer, will be a good test for our sanitarians and our sanitary science. If the dread disease comes it will be curious to watch its effects upon our sanitary associations and boards of health. The health officers who are medical men may be depended upon to do their duty, as they are always ready to do in any emergency. The *Sanitary News* points out that it only needs time to show what those boards of health which are composed of non-professional men will do for their cities, in the line of intelligent prevention and courageous hopefulness. There will be much fright, nervousness, and foolishness on the part of the population. Whether the preventive work of our sanitarians can overcome the effects of it all is a question to be answered next winter."

SEWAGE FUEL.

Dr. C. H. Vonklein, of Dayton, O., has invented a chemical process which he claims will disinfect sewage matter and turn it into a useful fuel. Different chemical salts are used, the most expensive being nitrate of silver. The doctor states that two dollars' worth of such fuel is equal in heat-giving properties to a ton of coal. It is made into brick-like pieces, without odor, and gives out a strong blaze. As the Doctor will not patent his process here is a chance for our local boards of health to furnish cheap fuel to the poor.

PREVALENCE OF MEASLES AND WHOOPING COUGH.

From the fact that measles is a manageable disease, and its mortality slight, may be ascribed the little attention shown to its existence as an epidemic in Montreal. From inquiries, and as a result of our own experience, such it is. All through the past winter season the number of cases of which the writer is cognizant has been somewhat extraordinary, co-existing with whooping cough, which has also attacked large numbers. In very many cases children were affected with both at the same time. The mortality of measles, even when complicated with whooping cough, has been so slight as to cause no alarm, and many families have not thought it necessary to get medical advice or treatment. Pneumonia as a sequence has prevailed, but without very serious consequences. Both disorders apparently began in the south end of the city and gradually spread northward where the greatest number are now to be found. We were inclined to consider the cause of its assuming an epidemic form to the coldness of the winter, obliging householders to close their dwellings and deprive themselves of free ventilation, the atmosphere being thereby vitiated, depressing the vital powers of the young, together with intercommunication at school accounting for its spread. We find, however, that other cities have had a like visitation. In New York during the past four months there were reported 2,153 cases of measles, with 402 deaths, or nearly one death in every five cases. This is a large death-rate, but we presume that the reported cases formed but a small portion of the actual number that occurred. We have estimated that there must have been over three thousand children laid up with measles in Montreal, and so appreciably has this been felt by the attendance at the schools that public attention has been drawn to it. From December 1st to March 1st the number of deaths by measles was 91, and of whooping cough 17. No deaths from measles occurred during October and November.

Local and General.

The recent meeting in the Recorder's Court to consider proper quarantine for inward-bound vessels from cholera-infected ports, gave timely warning to the Government and the citizens.

It now remains to be seen whether the suggestions will be acted upon. The history of cholera and its travels plainly shows that the disease can be warded off our shores if the Executive be fully alive to the dangers of the situation, and if they will carry out in practice what experience has proved to be effective in such cases.

I wish I had room to give the whole of the article on therapeutic evidence, published in a recent number of the *Therapeutic Gazette*, by R. T. Edes of Harvard. However here are a few of the observations which will, I am sure, find an echo in the hearts of most of us: "One observation of recovery under any given treatment of any disease which is usually curable by many different plans proves absolutely nothing as to the positive value of such a treatment. It only goes so far to show that it is not fatal; and it may be that such observations can be considerably multiplied without gaining a great deal in force.

How many plans of treatment of pneumonia have been built upon series of cases terminating favorably in from seven to ten days, and yet such a result proves absolutely nothing as to any positive value in the treatment. Negative value they may have, for it is possible to do much worse."

An old medical friend of mine, noted for his Hibernicisms and odd sayings, remarked to me one day: "I tell you that when there are many successful cures for a disease, there is really no specific treatment for it." If I were asked to formulate a rule by which to test the real curative value of a remedy I should say: where the average result of the treatment to be tested is in a thousand cases better than the average result of the "expectant" or hygienic treatment, the remedy tested has positive therapeutic value, and deserves a place in a Pharmacological text book.

I wonder what a Christian Scientist M.D. (or, for the matter of that, a Homœopathic or Hygienic M.D.,) would do if called to attend a case of cholera morbus.

Intestinal cramp is not a thing that readily yields either to the influence of the mind, the tenth dilution of arsenicum or the regulation of the diet. In the present and empirical state of things a hypodermic injection of certain anodyne drugs will be found more efficacious.

But to return to Prof. Edes: "When observation as to the effect of new drugs in the cure of disease is to be considered, the first thing wanted is a diagnosis. The great feats of therapeutics are performed by those who trouble themselves little about this trivial point. Witness the results of sulphate of copper in cases of croup, supposed to have been "membranous"; or of sulphate of mercury in the same disease "if the doctor be called early enough." Anybody can make wonderful cures if he can have the naming of the disease without criticism, but if enquiries be pushed far enough the diagnosis may be found even more wonderful than the cure.

Think of the success of homœopathy in "diphtheria," of the cures of Bright's disease diagnosticated by pain in the back and a deposit of urates in a cold chamber-pot. See the certificates of clergymen in the religious papers. Count the cancers cured by condurango."

A patient of mine, after having been treated for some months without success by a graduate (Heaven save the mark!) of the Christian Science College of Boston, proposed to the Spiritualistic medico that he shall offer himself up as an acceptable sacrifice upon the altar of a science which is not exclusively Christian, and allow a pin to be thrust under his thumb-nail so that she might, seeing him suffer no pain, have increased her faith in the curative powers of mind! This modern disciple of Gautama (for Christian Science is, in my opinion, but a poor attempt to revive some of the most objectionable parts of Buddhism) declined to allow this *experimentation crucis* to be made upon his vile body, and his visits abruptly terminated.

How true are the following sentences: "The earliest observation (of a new remedy) are almost certain to be favorable." "We all know the sanguine man whose therapeutics are those of the advertising pages, and who considers himself wide-awake and progressive on that account; and we know the other man who never believes anything as long as he can help it." "Accept the opinions of each, and print them both—if we have room enough—but give cases, too, that we may know which to believe next time."

In the above-mentioned article I fear Prof. Edes has not sufficiently considered the busy practitioner who endeavors at odd moments of leisure to extract the grains of wheat from the bushels of therapeutic chaff that fill the store-house of every medical periodical. On the whole, I would say, let the enthusiastic optimist and the sceptical pessimist fight the battle, while the cool-brained independent sits on the fence and watches the conflict, and when the smoke of battle has cleared away he will find that probably neither was exactly right; that the truth lay somewhere *between* them, if perchance there were any truth really worth contending for.

The excision of a hard glioma from the upper part of the fissure of Rolando by Mr. R. J. Godlee, is a grand clinical and physiological triumph, and although the patient has since died his death has not been in vain. The operation was suggested by Dr. Hughes Bennett, and was followed by relief from the lancinating pains in the head, vomiting and convulsions affecting the limbs—the most annoying of the symptoms—which indicated disturbances of the hand, leg and eyelid centres.

This case proves with what accuracy diagnosis of obscure cerebral lesions, thanks to vivisection, may now be made. Whether we shall ever be able to follow up our increased diagnostic powers by corresponding contributions to surgery of the brain remains to be seen.

In the meantime it is not to be expected that when medical remedies have failed we shall sit with folded arms and allow a cerebral tumor to make life intolerable when it is possible to gain even temporary relieve from the symptoms by the removal of the cause.

I have often heard the question of the ownership of the prescription discussed, but I never knew it to be so practically considered as lately when an order for a pint of gin given by a Connecticut doctor was retained by the patient (?) who had it duplicated many times.

Our "separated brethren" in Halton might take a leaf from this man's book, and so do away with the necessity of getting an order for their daily drink repeated.

Dr. S. Weir Mitchell's "In War Time" is out, and is well worth reading. It is quite a different sort of book from Miss Jewett's "A Country Doctor," inasmuch as it deals more particularly with a wayward specimen of the male M.D., and does not touch the question of female practitioners.

I wish in his next essay in the novel line that the author will give us, in the same graphic style, a more pleasing, more attractive hero than Dr. Wendell.

After all, the United States Governments, Federal, State and Municipal, have done and are doing next to nothing to provide for the probability of a cholera epidemic. As the intercourse between the countries is very intimate, we are closely concerned in such action, and we would be clearly justified in shutting ourselves completely off from a country which neglects to do what it can to prevent such a dire calamity as a visit of Asiatic cholera.

General Grant's days are evidently numbered. The disease began as a foul and painful ulcer on the base of the tongue, progressed rapidly, and has destroyed the right anterior pillar of the fauces and part of the tonsil. There is also enlargement of the anterior cervical and sub-maxillary glands. The microscopical examination of fragments removed from the growth show the characteristic "nests" of epithelioma.

The patient is thin and anæmic, and yet in spite of the pain and the other distressing symptoms accompanying the disease he heroically works away at his memoirs of the great war.

Our City Council has decided to employ two medical men to do the public vaccinating. Their hours are to be the same as those of other city officials, and they will receive the magnificent salary of $600 per annum.

I hope any corporation that expects men to give practically their whole time to this important work for such a consideration will succeed in obtaining the necessary amount of work for them to do. Either they will not keep the hours laid down, or else they cannot hope for private practice.

P. A. LAVER, M.D.

MONTREAL, March 18, 1885.

OBITUARY.

WILLIAM BRAITHWAITE, M.D.

Mail advices from England announce the death of the well-known English physician and surgeon, William Braithwaite, the founder of *The Retrospect of Medicine*, who died at his home in Leeds on January 31. *The Yorkshire Post* of February 2 contains the following:

He was the oldest medical practitioner in Leeds, and in his large and varied practice he was esteemed on all hands, both on account of his great knowledge and his sympathetic and kindly disposition. Dr. Braithwaite was born in 1807, and was therefore in his seventy-eighth year. His health for some time past has been such as to cause serious apprehension on the part of his family and friends, and his death on Saturday was not altogether unexpected. He was brought up by the Rev. Richard Hale, at Harewood Vicarage, and was apprenticed to the eminent surgeon, Mr. Thomas Teale, and afterward to his equally eminent son, Dr. Thomas Pridgin Teale, so that he pursued his medical curriculum under exceptionally favorable circumstances. He also studied at St. George's Hospital. The deceased gentleman began practice in Leeds on his own account in 1830, and filled the post of honorary surgeon to the Eye and Ear Infirmary and lectured at the Leeds Medical School on the diseases of women. Though occupied in the management of a large practice, he found time to add materially to the literature of his profession. In 1840 he began a medical work which has since become widely known. Its title is *The Retrospect of Medicine*. It is published half-yearly, and has now reached its ninetieth volume. It is republished in America, where it is widely known and as highly valued as here. During the last few years his son has been co-editor with him of this journal. He married a daughter of Mr. James Beardoe, of Ardwick Green, near Manchester, by whom he was survived. He also leaves three sons.

In 1840 Dr. Braithwaite's half-yearly *Retrospect* was republished by Daniel Adee, at $1 per annum. At that time there were only two medical publications on this side of the Atlantic. Subsequently, by the gradual enlargement of its pages, the price for *The Retrospect* was increased to $3. In 1850 *The Retrospect* became the property of Stringer & Townsend, from which year, by an agreement with its editor, advance copy of his work was received in this country in time to be issued simultaneously with the London edition, for which an annual royalty was allowed. W. A. Townsend, successor to Stringer & Townsend, has continued the publication to the present time, with a constantly increased circulation and popular demand. In May, 1881, Dr. Braithwaite wrote to his American publisher the following:

I little expected about forty years ago that I should live to see my eighty-second volume and that it still maintains its popularity. I am now seventy-four years of age, but feel uncommonly well, thanks to being a total abstainer from alcohol for nearly thirty years.

A letter just received by Mr. Townsend, dated February 3, from Dr. James Braithwaite says:

I grieve to have to inform you of my father's death, which occurred on January 31 last. He died without any suffering and from failure of the heart, which had been noticeable for twelve months previously. I shall carry on *The Retrospect* with the assistance of Dr. A. G. Barre, assistant physician to the Leeds General Infirmary. I have done all the heavy work of the book for twenty-five years, that is, all the writing.

It will be seen *The Retrospect* will be published, as before, under his editorial charge, assisted by able colleagues. Dr. James Braithwaite's name has appeared on its title-page connectedly with his distinguished father's for a quarter century.

REVIEWS.

Transactions of the College of Physicians and Surgeons of Philadelphia. Volume Seventh, Philadelphia. For sale by P. Blakiston, Son & Co.

This volume shows that good work has been done during the year by the members of the College of Physicians and Surgeons of Philadelphia. It contains sixteen papers and discussions thereon. All are of more or less interest, and show that much attention has been devoted to their preparation. We would suggest to the Editorial Committee of the College the advisability of having the leaves of future volumes cut.

A Practical Treatise on the Diseases of the Ear, including a Sketch of Aural Anatomy and Physiology. By D. B. St. John Roosa, M.D., LL.D. Professor of Diseases of the Eye and Ear in the New York Post Graduate Medical School and President of the Faculty; Surgeon to the Manhattan Eye and Ear Hospital; Consulting Surgeon to the Brooklyn Eye and Ear Hospital; formerly Professor of Ophthalmology in the University of the City of New York, and Diseases of the Eye and Ear in the University of Vermont; formerly President of the Medical Society of the State of New York, etc., etc. Sixth Edition, Revised and Enlarged, pp. 718. New York: William Wood & Company, 1885

The fact that the American profession has called for six editions of this work in eleven years is sufficient proof of its high merits. The work has been favorably received in Great Britain and Ireland. The sixth edition is of the same high standard of its predecessors. The work is of a decidedly original character, conclusions being based upon an experience derived from over twelve thousand cases. It is fully illustrated, and will serve as a clear and reliable guide to the general practitioner, having charge of ear cases, as well as to those who devote themselves especially to that subject.

A Theoretical and Practical Treatise on the Hemorrhoidal Disease; giving its History, Nature, Causes, Pathology, Diagnosis and Treatment. By William Bodenhamer, A.M., M.D. Illustrated by two chromo-lithographic plates, and thirty-one woodcuts. pp. 297. New York: Wm. Wood & Co., 1884.

This is a very complete and excellent work by one who has written a good deal on the diseases of the rectum, and who is entitled to speak with authority concerning the hemorrhoidal disease.

The author introduces a short and interesting Hebraic history of the disease, showing it to be the oldest mentioned in ancient history. It is mentioned in the Fifth Book of Moses under the name of Emerods, as one of the punishments of the children of Israel for their disobedience.

The pathology of the affection is clearly described, the author holding that the commencement of the disease is in the vessels of the rectum. The coats of these vessels first becoming diseased, and then the sanguine flexion occurring as a *consequence* of this weakened condition of the walls of the vessels and not as a *cause*.

Under the head of Etiology, the influence of heredity, temperament and climate, etc., etc., as predisposing, and of diet, constipation, mode of dress, etc., etc., as exciting causes, are very fully discussed.

The subjects of diagnosis and treatment are particularly full, explicit and complete. The advantages of the different methods of surgical treatment are compared, that by ligation as performed by Mr. Allingham being favored. The different modes of excision and injection are carefully explained in detail. The book is well worthy of a place in every medical library.

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VALEDICTORY ADDRESS.

Delivered on behalf of the
Medical Faculty of Bishop's College
to the Graduating Class of 1885,
By
A. LAPTHORN SMITH, B.A., M.D., M.R.C.S. ENG.,
Professor of Botany.

GENTLEMEN GRADUATES:—

The Faculty has this year conferred upon me the honor of addressing some farewell words on their behalf, to you, the gentlemen of the Graduating Class of 1885. I shall not detain you long, for I am well aware of your impatience to set loose your hopeful barques upon the flowing tide which is about to bear you on to fame and fortune, in that near future on which you have so often looked with dreaming, longing eyes. I am glad to have the pleasure of being the first to congratulate you on your success and to welcome you to the ranks of the profession.

In the remarks which I am about to make I would speak to you as those whom we have treated as fellow-workers rather than as pupils in the past, and who are now our colleagues and younger brethren—to whom we would, ere parting, give some kindly-meant encouragement and advice. For, owing to the somewhat limited number of the students attending this young but vigorous school, you have occupied an unique position, and had unusual advantages here. Your professors have become personally acquainted with each one of you, and your varying capacities and needs, and were thus enabled to raise you when you fell and strengthen you when you were weak. Some, alas! who began with you, have fallen out of the onward marching ranks, but this has been from no fault of their professors, who sympathize with them in their misfortune, and hold out to them the hope that another year's study will bring them up to the standard which you have attained.

Becoming, as you have, so well acquainted with your teachers and with each other, you have developed a strong *esprit de corps*, for which this school is noted, and of which we have frequent proofs, by receiving letters from former students now occupying high positions in different parts of the Globe. We have done the best we could for you, in the time at our disposal, which was all too short to impart the immense and constantly increasing mass of information, which every well-informed medical man is bound to possess. We have brought you this far, but you must continue your great unknown journey through life alone, and stand or fall on your own merits. You have passed your final examination in this College, but you have yet another and a longer one to pass, which will begin with to-day, and only end with your life—I mean the great examination before the public. But if you really have assimilated the knowledge imparted to you, and which we believe you to possess, you need have no fear as to the result.

I well remember the day, nine years ago, when I stood in a position similar to that you now occupy, and the feeling of pride and exultation I experienced, when I was welcomed by my late awe-inspiring professors as a man and a brother, and a full life-member of our noble profession. I may also tell you, in confidence, that I felt, as you

probably feel now, that I knew a great deal more than most, or at least as much as any of them. You will probably retain this opinion until you begin private practice, when you will commence to realize how much you have yet to learn, and I may add, the sooner you realize it the better, or, in the words of St. Paul, "If any man think that he knoweth anything, he knoweth nothing yet, as he ought to know."

Now that you have received your degree you belong to a profession which, if you rightly esteem the honor, entitles you to the highest position in society. The widow of one of Montreal's former most prominent medical men told me not long ago that in this country, where there is no hereditary aristocracy or nobility, the learned professions constituted the only aristocracy we had, and that among them none were more deserving of the first place than the one to which you now belong. But you must not think that this position is heaven-born, or that your degree and diploma are anything more than certificates; that you have mastered a certain amount of difficult technical knowledge. The title of M.D. which you have received to-day only confers a high position upon you, because the great majority of the honorable men who have borne it before you have raised their profession to that position by the high moral tone of their character and by their devotion to duty. And just as soon as the profession as a body ceases to be self-sacrificing in action, pure in character, honest in purpose, and noble in aspiration, it will no longer obtain or deserve the high esteem in which it is now held. There may at any time be a few black sheep in it, but they will generally be valued at their true worth, without in any way detracting from the reputation of this profession as a whole.

Each one of you is bound to do his share towards upholding its honor and integrity. Hardly anything that you can do will conduce more to this end than the strict observance of the etiquette which exists among medical men, the rules of which are embodied in the code of ethics, which is not a species of trades-unionism, as the public seem to think, founded for the purpose of protecting the business interests of the Doctors. St. Thomas was once asked for some rules of religion, when he replied in the famous sentence: "Love God and do what you will," and in like manner if you were to ask me to sum up the code of ethics I might reply: Be a gentleman to your brethen and the public and you cannot err; you will do to others as you would have others do to you. So important do I consider this sometimes misunderstood qualification of being a gentleman that it has often seemed to me that it would be alike in the interests of the profession and the public that some test or guarantee that he is one should be devised and exacted from a candidate before allowing him to begin the study of medicine. In the words of the poet:

> Who misses or who wins the prize—
> Go lose or conquer, as you can;
> But if you fail, or if you rise,
> Be each, pray God, a gentleman.

Next to that there is another desideratum, which is often lost sight of, viz., that medical men should be gentlemen of culture, either in art, science or literature. The very title of Doctor supposes that he is learned; and learned not only in his own profession, but in all the allied sciences, and certainly as a body the profession is generally acknowledged to be composed of well-informed men, many of them occupying the highest rank in the army of scientific workers. Much of their learning has been acquired after they have been passed and stamped, instead of being possessed of it when it would have been of most use to them, viz., before beginning their medical studies, as I think it should.

The University of Laval has an old-fashioned way of encouraging intending medical students to make themselves generally well-informed before beginning the study of medicine, and that is by teaching them for something like half price if they have already graduated in art, science and literature. And since I have been engaged in teaching, some five years, I can quite understand why such a difference is made; for it is just twice easier to teach physiology, for instance, to a student who is familiar with natural philosophy than one who has had no scientific and classical education, beyond having his head crammed full of a jumble of words he hardly understands, during a few months previous to his commencing the study of medicine.

It is true you will have an opportunity of cultivating your minds during the next few years which generally have to elapse before the public have discovered your abilities. But this point brings me to some words of encouragement which at the outset of my address I promised to give you. Although, as you are probably aware, for the the first year or two you will have very little practice; you must not feel annoyed or discour-

aged at this, for it is quite natural that people should prefer those who have already attended them or their friends, and of whose reliability they have thus had some opportunity of forming an opinion rather than try some one of whom they know nothing. This however, is not an unmixed evil, for, as I have already said, you have great need of a few years of freedom from the care and anxiety of a busy doctor's life, in which to cultivate your minds. Besides this, while a student you have had no time and will have none when a busy practitioner, to enjoy social pleasures, yet in the few years between these two stages of your life you will have the leisure for, and cannot better employ a portion of it than in social intercourse. Although the medical student is proverbially gallant, yet during his few years of existence he has been thrown more in the society of his jolly, rollicking companions than in that of gentle ladies; and there is no way that I can suggest more likely to refine the manners than to frequent the society of refined women. This is all the more important as, throughout the whole of your profesional career, the ladies will be your best friends; in fact, they have it in their hands to make or mar you, and woe betide you if you incur their displeasure. And so I would recommend you to devote your evenings for the next few years to extending the circle of your lady friends.

Do not be discouraged by those who tell you that the profession is overcrowded; there is now, and always will be, room in the profession for well-educated, hard-working, self-denying men; indeed it is just where it seems most crowded that such a man has the best chance of getting on. But there is little or no room for the half-educated, or the indolent, or the self-indulgent; for them the profession *is* overcrowded, especially in the cities, and their only chance of success is to start in some country place where they will have no competition to contend with.

While holding out every encouragement to those who are beginning practice, there are a few things of which I should forewarn you, and first, if you are going to begin in a large city, you must not expect a large practice all at once. It takes time for the public to become aware of the fact that you are ready and willing to attend them, and after that it takes longer still for your turn to come around to get a chance of showing your ability. The rich have not the inclination, and the poor have not the means, to find you out, and you cannot advertise. Although this may seem hard at first, yet in the end it turns out for the best; for some of the leading medical men of Montreal to-day owe their present success to the fact that they had so few patients for the first few years that they had plenty of time to study up each case when they got one, and what they learned then they never forgot. Moreover, could we all jump into a lucrative practice at the close of our college career, the poor would have no one to attend them; and yet they are the ones who most require attention, for their poverty is often the cause of their disease. The older practitioners have not the time to attend them, and they must therefore depend upon you during the first years of your practice. To attend the poor should be considered by you as a privilege you can thus bestow thousands of dollars worth of your time when you have no money to give in charity; and besides that you will thus be enabled to make friends of those who, poor as they may be, will be better friends to you, professionally, than the rich.

You have just come from the College and Hospital where your powers of observation and other intellectual machinery have received a high polish, and what you have most to dread is intellectual rust. I therefore commend you to work; not so hard as you have been doing, but still work hard. When you cannot get much remuneration work for a little—work for nothing—work for the work's sake. I would recommend you strongly to pursue some original investigations in the vast field of scientific research—especially that part of Botany for instance which comprises the study of the least and lowest forms of life. To follow out the details of Pasteur's great discovery, and make a grand reality of what we are still compelled to call the Germ *Theory*. Reason out the existence of, search for, *find* the germs of pennmonia, puerperal, typhoid and every other fever which now we can but suspect,—*that* would be a result for which no honor could be a reward too great, for which, to purchase, a thousand lives would be too cheap a price. Where Pasteur the country lad has done so much, why should not you do, or at least attempt, some more. Many things which we now see as through a glass darkly, we shall then see face to face.

The profession you have embraced is a hard one, but you are not called upon in conscience to needlessly sacrifice your health. Indeed every year you live your experience makes your life more valuable to the public welfare. It there-

fore becomes your duty to take an early opportunity of informing your patients it is very much in the interest of all concerned, and especially of the one who pays the bill, to send for you in the day time, instead of waiting until two o'clock next morning, as so many people do. The public seem to think sometimes that their family doctor is composed of two separate beings: one the human, who works hard all day, busy and anxious; the other superhuman, a species of night ghoul, who sleeps all day and revels in being called out at night.

It will not only be your duty to take care of your own health in this and many other ways, but you are in a great measure constituted the guardians of the public health. Indeed your services in *preventing* diseases are of far greater value than in curing them after they have been contracted. Indeed I venture to say that for every life that medical science and skill has saved by cure they have saved a hundred by prevention. Do not be disappointed when you discover that for these important services you will receive no remuneration and hardly any thanks. Do not be discouraged even to find that the very people whom you are generously trying to benefit, by showing them how to avoid sickness and to do without your medical attendance, will sometimes consider you an officious busybody. Persevere in doing your duty, in spite of any rebuff, for *you* have the knowledge which they have not.

You are starting out in life, and in a few years we shall expect to hear some encouraging word of your whereabouts and welfare, for, though an ocean should roll between us, your lives will ever be of the greatest interest to us; we shall ever be proud of your success, but also ready to cheer you and sympathize with you in misfortune. Where you will start has probably been thoroughly thought over in your own minds; but I may offer you a few suggestions. If you start in the country you will necessarily be general practitioners, the backbone of the profession who have won in ages past the proud position of family friend and adviser,—nay, more, of father confessor. In that position you will acquire a large experience of men and things, and this, added to your liberal education, will make you one of the leading men of your district, whose opinion will be sought upon every conceivable subject, from the merits of the protective tariff and the demands of the Canada Pacific to the coming of cholera and the war in the Soudan; and if in the course of time the electors of your district offer you a seat in Parliament, accept it as a duty, and do your duty there as honestly and fearlessly as in the humbler, but not less noble, sphere of a country doctor's life. But if you mean to settle in some large city, such as this, I would advise you to go to Europe for a year or two first, to work up some special subject, unless you are willing always to work among the poor. For here, alas! the rich no longer enjoy the luxury their forefathers once possessed and cherished, the family doctor; and the army of specialists now occupy his place. The mother who used to unburthen to him her aching heart, heavy with family cares, and the dear children who used to run to greet his smiling face, now welcome him no more. I was told the other day of a family where five specialists were all in attendance at once, and when the family doctor who had attended the parents ever since they two were made one, and who had brought them and the children through a hundred and one diseases, asked in a voice trembling with emotion, What is to become of me? the head of the house replied, "Oh we shall keep you on to tell us which specialist to call in next, as it sometimes puzzles me." Gentlemen, specialism has done much for science, more for the profession, most for the specialists. But it is just a question whether it is not being overdone. There is just the danger that the eye may be focused so intently on one object that it can see nothing else around, as illustrated in the following incident, which was related to me some time ago. A lady called upon a doctor, not knowing that he had a specialty, and requested him to see her little girl, who was ill with some kind of fever. He frankly told her that he didn't know anything about fevers, "but," said he, "give her this powder and she is sure to have fits; and, if she does, send for me, that's my specialty." It would probably be as well for the profession and better for the public, if every doctor were a good all-round man who could call in consultation in difficult cases a brother practitioner who had devoted some extra study to that particular disease. Gentlemen, I can no longer put off, what I fain would never say, the last sad words of parting. On behalf of the Faculty whom I represent, and on my own behalf, I wish you God-speed and all success in the noble work that lies before you. May you make this earth at least a little better for your having lived upon it. May your lives be such that you may be loved while you are here and missed when you are gone. Gentlemen, farewell.

Correspondence.

MONTREAL, March 1[illegible]

To the Editors of the MEDICAL RECORD.

Being a subscriber to and a reader of your Journal I have noticed in this month's issue of it, at page 141, the following paragraph, viz: "I wonder what a Christian M. D.—(or, for the matter of that, a Homœopathic or Hygienic M. D.) would do if called to attend a case of cholera morbus." The most of physicians, to whatever sect they belong, have some knowledge of Hygiene, but, as I am as ignorant of the method of cure of the Christian scientist alluded to as the *Wanderer* seems to be of the Homœopathic method, it will more become the duty of the Christian scientist to enlighten this *Wanderer* on this later point, in the treatment of cholera morbus.

I will venture, however, to give Wanderer some hints as to what should be done in a case of cholera morbus, homœopathically, as perhaps I may claim some little right to do, as I have tested pretty fully now both the Allopathic and Homœopathic methods of cholera treatment, and have found the latter much more efficient in relieving and curing cholera as well as other diseases.

In reply to Wanderer, then, I would say the first thing to be done in the Homœopathic treatment of cholera is to prepare himself by studying the scientific method of prescribing homœopathically. By doing so, Wanderer would learn, I think, not to pay so much attention to the mere diagnostic naming of the disease to be treated as he would do to the totality of the individual symptoms of the patients who presented themselves to him. He would thus find that these physiological indications of each case would lead him to their sources, and enable him to select the appropriate remedy for that case more successfully than he would when merely treating according to the nomenclature of the case. When the symptoms produced by the administration of large doses of medicinal matter upon a healthy person produce symptoms similar to those symptoms of a dynamic disease, we may be assured that the sources of both are the same, whether functional or organic. The principle of Homœopathy, then, is to elect a curative dose of the medicine, which, when given in pathogenetic doses to a healthy person, will produce symptoms similar to those produced by the disease to be treated. By the study of this principle, Wanderer would know what to do, not only with cholera morbus but with individual cases of all other curable diseases. Has Wanderer never heard of the Report which was made to the British House of Commons regarding the treatment of Asiatic cholera by Dr. McLouchlan, the Allopathic physician, and Medical Inspector of the General Board of Health.

The Report of Dr. McLouchlan stated that under Homœopathic treatment the deaths in Asiatic cholera were 16.4 per 100, under Allopathic treatment the deaths in Asiatic cholera were 59.2 per 100. Which treatment would Wanderer select for himself after that, if he had the misfortune to be afflicted with cholera, or which treatment would be selected by any rational man, if these statistics were proven to be true, and they have been so proven? Dr. McLouchlan avowed that he would rather be treated homœopathically after noticing the results of both kinds of treatment. If Wanderer has a disposition to study Homœopathy after this there is abundance of literature on the subject. For an Allopath to begin with there is Horner's Reasons, Hahnemahnn's Organon, Hughes' Therapeutics and Pharmacodynamics, Ranes' Special Pathology and Therapeutics, and a very recent and correct little work by L. Talzer, M.D., of Calcutta, who has had much experience of the treatment of cholera in India. These books, or any others, may be obtained through our townsman Mr. Grafton, bookseller, St. James St.

I have seen in the last number of the *Canadian Practitioner* the publication of a lecture on arsenic by our fellow-citizen, Professor James Stewart. It is very able and searching from the Professor's standpoint, and does him much credit, but there is a good deal of it illustrative of the Homœopathic cure. Now Messrs. Editors, I would just say here, why should we not be all searchers after scientific truth for its own sake? Why should we not throw aside for ever sectional antipathies? Truth, it is said, will prevail at last. Let there be liberality and freedom in expressing our individual views, so that each man while he lives may help along the right spirit of the Profession.

Yours truly,

JOHN WANLESS, M.D.

Progress of Science.

PNEUMONIA—AN INFECTIOUS DISEASE.

We extract from the *Medical Record's* report of the proceedings of the third German Congress for Internal Medicine, held at Berlin, April 21-23, 1884, the following paper, by Professor Jürgensen, of Tubingen, on *True Pneumonia: Its Etiology, Pathology, Clinical Course* and *Therapy*. *

The author gave a history of the growth of our knowledge of croupous pneumonia, and showed how opinions as to its nature had changed, until now the belief exists that pneumonia is a general infectious disease, the lung inflammation being only symptomatic. Experimental pathology had recently given indirect confirmation of this view.

The speaker then took up the alleged exciting causes of the disease, and showed that the facts regarding these did not conflict with the infection theory. Cold has been alleged to be a cause. At one time it was even said: "Frigus unica pneumoniæ causa." Different authorities reported cold to be a cause in between two per cent. and twenty per cent. of the cases. Jürgensen had in ten years' observation found cold as a cause apparently in ten per cent., really in only 4.1 per cent. It might easily be thought that exposure will produced a catarrh rendering easy the access of the infectious organisms of pneumonia.

It is a prevalent error, says Jurgensen, that pneumonia attacks by preference the strong and full-blooded. Among a population of all ages, three-fifths of the pneumonias occur in those between one and fourteen years, while twice as many occur after forty-five as between twenty and forty-four. Dittel found that the disease occurred in those previously weakened, in eighteen per cent. Flint, of Danemark, in twenty-one per cent.; the author, in 29.3 per cent. Immermann, of Basel, recently confirmed this view.

The disease has some relation to the meteorological conditions, being increased when there is increased humidity of the soil (Keller), and when the atmospheric precipitates are above the mean. These facts might be explained by the theory of an organic poison.

Pneumonia is *a disease of dwelling-houses*, like typhoid. Jürgensen had seen pneumonia in a dwelling in Amberg. Some time later the pneumonia cocci were found in the walls of the chamber. The disease occurred in epidemics, especially affecting single houses, or prisons, asylums, etc., etc. The possibility of direct passage of the disease from one person to another cannot be denied, but the occurence is rare. Flint, of Danemark, found some relation between earlier and later cases in two-thirds of his patients.

The question of the unity or multiplicity of the pneumonia poison would soon be settled.

Clinically, the disease presents great diversity even in the same families and sick-rooms. This the author was inclined to explain by assuming a variation in the extent of the development of the infectious poison. He believed that this poison, circulating in the blood, affected with special inflammation or disturbance other organs than the lungs. He cited thirteen cases of pneumonia with acute nephritis in which the kidneys were found to contain the special cocci. He believed that these produced special disturbance of brain membranes or stomach or other organs. Their development gave rise to the irregular curve of pneumonia.

Clinically, the disease may be separated into three great groups, first, those in which the general symptoms of infection; second, those in which heart symptoms; and third, those in which the lung symptoms are prominent.

In reference to prevention, the discovery of the coccus and the knowledge that it is a house-plant is of importance.

As to treatment, the author had tried iodine as an abortant without effect. The author gave a *Caution as to antipyretics*, considering them heart-depressants. He pleaded for prophylactic therapy, was doubtful of the ultimate value of bleeding, though it might temporarily relieve the heart. Finally, he announced the following conclusions: first, true pneumonia is an infectious disease, usually but not uniformly localized in the lungs; second, exposure to cold is a rare cause. The feeble are more susceptible to it than the strong.

Herr Frankel, of Berlin, continued the discussion, and took up the subject of the

Micrococcus of Pneumonia.—This coccus is distinguished from others by its gelatinous-like capsule which may surround two or more cocci. The capsules are not always present. The cocci are stained by a mixture of gentian-violet in water. Injected into rabbits they produce no uniform effect, in mice they cause pneumonia and pleurisy. In dogs, pneumonia is sometimes produced. The author found that variations in inoculation effects depended somewhat upon the cultures, which apparently had an effect of diminishing the virulence of virus. There was also another encapsuled coccus found in the human mouth, and which was the coccus of sputum septicæmia. The author announced the following theses:

1. The coccus of pneumonia, which may be isolated by pure cultures from the human being, is inoculable in various animals. Rabbits either prove refractory or become affected with severe general disease, with special localization of the virus in the internal organs—this depending on the mode of culture.

2. Further experiments must determine upon

* Many of our readers will be reminded by this paper, of a paper on the *Relations of Certain Filth Diseases to Cold Weather*, read before the American Public Health Association, in New Orleans, 1880, by A. N. Bell, with special reference to the zymotic origin of pneumonia. It is published in full in Reports and Papers of the A. P. H. Association, Vol. VI.; and in *The Sanitarian* Vol. IX: p. 78.—Editor.

what depends the varying virulence of the coccus.

3. The capsules of the cocci, as well as the "Nagelformige" growth of the pneumonia cultures, are not constant phenomena.

4. The capsules and the "nagelcultur" characterize other micro-organisms, and it cannot be said at present that the pneumonia cocci can be distinguished from them.

Herr Friedlander, of Berlin, said that the cocci of pneumonia were found in the blood during the disease. He had recently obtained the blood by wet-cups in six cases of croupous pneumonia, every precaution being taken to keep it pure. The blood thus obtained was cultivated for cocci. In one out of the five cases these developed and showed their characteristic actions when inoculated. Friedlander thought the capsule and the growth in "nagelform" very characteristic, but not sufficient for a positive diagnosis. The whole life-history must be taken into account. This life-history appears to differ, and this may account for the various forms of pneumonia, and only one has the coccus ; or in the different forms the same coccus has a different life-history. The chief efforts must now be made to follow out the different changes in the growth of the organism.

Dr. Gerhardt, of Würzburg, accepted Jürgensen's view of the infectiousness of the disease. He accepted also completely the view of the unity of the disease, and considered it a happy explanation that the various complications of meningitis, pleuritis, etc., were due to local manifestations of the virus. As to treatment, it must be expectant and symptomatic ; in the anæmic and feeble, a stimulating treatment. As anti-febrile means he thought veratrine dangerous ; digitalis had not achieved as much as expected ; kairin acted too irregularly. The most regularly acting substance was nitre (nitrum) ; in severer cases, quinine : in the worst (febrile) cases, cold baths with stimulants.

Dr. Frantzel, of Berlin, argued against Jürgensen's view that pneumonia was a house disease, citing its occurrence in military hospitals, and its frequency after open-air festivals and exposures. He thought the coccus entered the blood through the lungs. He explained the hæmadogenous jaundice of pneumonia by the theory that the cocci attack the red blood-cells.

Dr. Ruhle, of Bonn, contended that the view of the infectious nature of pneumonia was not so firmly established as its advocates assumed. It is necessary still to harmonize some of the known facts as to the etiology of pneumonia with the theory of a coccus. Besides, this coccus had not been found in all cases yet.

Professor Nothnagel said that in pneumonia, as in all infectious diseases, we look for a specific, and meanwhile treat symptomatically. In the last twenty-five years alcohol had entered largely into the therapeutics of the disease. Dr. Nothnagel thought that it was often used unnecessarily and excessively. Alcohol is not indicated in ordinary cases of pneumonia, and should not be used except when specially indicated by the failure of heart power.

Dr. Rosenstein, of Leyden, thought that "though croupous pneumonia may be an infectious disease in many cases, it is not in all." He did not believe in the unity of the disease.

Dr. Baumler, of Freiburg, said that a patient, a gardener, fell one day into the fire ; next day he was brought to the hospital with croupous pneumonia. What rôle the cocci played in such a case was for the future to discover. If pneumonia is an infectious disease, it might be asked whether it is at first a local infection or a general one. With reference to the localization of the alleged virus in other organs, he recalled cases of pneumonia that started off with an acute nephritis ; others with a meningitis. These diseases generally ran a parallel course with the pneumonia.

PNEUMONIA.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Pepper, M.D., LL.D.,
Provost and Professor of Theory and Practice of Medicine in the University of Pennsylvania.
Reported by William H. Morrison, M.D.

Gentlemen—The patient now before you is convalescing from an attack of pneumonia. I showed him to you one week ago on the fourteenth day of his attack, completely apyretic. He has not come up after this attack as quickly as we should like to have seen him. His past history has not been altogether satisfactory. In the first place, we find that he is the subject of constitutional syphilis, and, in addition, he has been exposing himself. When seized with pneumonia, he was not a good state of health, and this has undoubtedly retarded convalescence ; for he has been completely free from fever for ten days, with a pulse about normal and respirations not over twenty per minute ; nor have the physical conditions progressed as rapidly as we desired ; while the critical fall of temperature, the failure to rise, the slow pulse, the easy respiration, the tranquil face and the return of appetite, indicate that the process is practically at an end. There are still traces of infiltration along the anterior border of the right lung, showing that the elements of the tissues do not throw off all traces of the morbid action and return to the healthy state, but that the morbid condition is lingering in the epithelial lining of the alveoli. Whether or not this is dependent upon the constitutional infection which he presents is a question which has been discussed, and which we have endeavored to meet by adding iodide of potassium to the treatment, which, for the past few days, has consisted in the administration of carbonate of ammonia. The treatment of the acute stage consisted in the use of carbonate of ammonia, a moderate

amount of quinine and stimulus in moderation.

The physical signs would be of interest, if I could demonstrate them to you. There has been, throughout the course of the case, low down on the right side, an area of unusual clearness on percussion, almost tympanitic. There was pseudo-tympany like that which is constantly found over a portion of the lung when the remainder is compressed by a pleural effusion, and which we sometimes find over the upper part of the lung when the lower part has become solid. The alteration of the tension of the vesicles, and in the pressure of the inspired air, give rise to a modification of resonance closely simulating that found over a cavity. To this modification, the name pseudo-tympany has been given to distinguish it from true tympany.

I indicated to you, in this case, the unusual distribution of the pneumonia. It began at the apex, and extended through to the back and downwards, until, perhaps, three-fourths of the right lung was involved, the lower part of the lower lobe in front remaining unaffected. It began as an apex pneumonia, the posterior part next became affected, while the anterior part of the lower lobe remained intact. By far the majority of cases of pneumonia, present affection of the lower lobe, and in the majority of cases it remains limited to the lower lobe, but in a large number of cases, the disease extends from the lower to the upper lobe, and the whole lung becomes affected.

There are peculiarities about apex pneumonia to which I shall refer. It is far more common in children than in adults, and this occasionally leads to pneumonia in children being overlooked, from the failure to study the whole lung and the restriction of our attention more particularly to those points in which we are more apt to find consolidation in the adult. Not rarely little children will have true croupous pneumonia, running through its stages, and terminating just as we see it in the adult, but limited throughout to the upper portion of one lung. Let me, in this connection, impress upon you the fact that there appear to be closer cerebral sympathies with this type of pneumonia than with the common basic pneumonia, and that partly because the nervous system of the child is extremely susceptible, and partly from the reason that I have mentioned, there is apt to be developed cerebral symptoms of a marked type, so that this is known as the cerebral form of pneumonia, and these nervous symptoms are apt to still further obscure the recognition of the inflammation of the lung, and these cases are apt to be treated as cases of tubercular meningitis, or simple meningitis, and the pulmonary condition not recognized. In children with nervous symptoms, if cough or chest pain is noticed, the chest should be examined with extreme care, front and back, from top to bottom. In these cases cerebral symptoms of the most alarming character may be present and pass away as the pneumonia diminishes.

Apex pneumonia is more common in young adults than it is either in children or mature people. It is apt to occur in those disposed to phthisis. There is trouble in securing complete resolution in such cases, which are apt to run into a sub-acute form and eventually develop into phthisis.

Again, apex pneumonia is met with under the influence of constitutional disturbances; thus, when pneumonia appears as a complication of malarial fever, I have often seen it involve the apex. In typhoid fever, I have seen the inflammation involve the apex more frequently than is the case in frank, idiopathic pneumonia.

These are the three most important peculiarities of apex pneumonia: In the first place, its occurrence in a somewhat obscure form in children being associated with marked cerebral symptoms. In the second place, its disposition to be followed by phthisis, and in the third place, its existence as complication of some general specific disease.

I cannot say that syphilitic pneumonia, by which term I mean something different from pneumonia in the syphilitic, for those who have constitutional syphilis may have a frank pneumonia in the same way as one free from that taint, while, on the other hand, there is a special form of pneumonia which may be called syphilitic pneumonia, which is a syphilitic affection of the lungs with the infiltration of the tissue of the lungs with a special plasma, rich in ephithelial cells, preventing, by its large amount and by the pressure which it exerts on the alveoli, the proper circulation of the blood, and giving rise to hepatization, which is very pale, dry and friable, being made up largely of epithelial elements. I cannot say that this syphilitic pneumonia especially involves the apex. It is as likely to affect the lower as the upper lobes.

I have already stated that there is in the present case an area over which pseudo-tympany is heard on percussion. In addition to this careful percussion will develop at about the third interspace, a cracked pot sound. This is not to be attributed to a cavity, for none of the lung tissue has broken down. It is dependent on the fact that there still remains, at a considerable depth, infiltration and partial consolidation in the neighborhood of a large bronchial tube. This condition is similar to that which is present when there is a small cavity. By placing the body against a firm support, and percussing with more emphasis than usual, we communicate a shock to the air in the cavity, and express a part of it from the bronchus, giving rise to the peculiar chinking which is known as the cracked pot sound. The same thing may be produced in certain conditions of partial consolidation in the neighborhood of a large bronchial tube, particularly if the ribs are at all flexible. The presence of this sound is one of the things that disturbs me in reference to this case, for it shows

that while the morbid process has ended there is still a deep infiltration of the lung, which is probably associated with the constitutional taint. I have no doubt that by a continuance of the treatment which I have mentioned, particularly by the use of specific remedies, we shall secure the removal of this infiltration, but it is a warning to us that, although the temperature and pulse are normal, we should be careful how we allow these patients to expose themselves, until we are satisfied that the local conditions have entirely passed away.

We have all been taught, by sad experience, to be careful during the convalescence of certain specific diseases, notably typhoid fever, but I fear that we are not nearly so careful in the management of convalescence from local affections, particularly those of the chest. It is one thing for the temperature to fall to normal, the pulse to come down, and the breathing become easy, and quite an other thing for the local lesions to be entirely removed. Under such circumstances the patient, if allowed to expose himself, is in danger of a relapse. Even if a relapse does not take place, something which is worse may develop. If a slight trace of inflammatory process be overlooked and the patient be allowed to return to his ordinary occupation, it will remain and slowly take on a chronic degenerative change. The great majority of chronic troubles result from imperfectly cured local affections. This is pre-eminently true in regard to catarrhal pneumonia. It is true to a less degree as regards croupous pneumonia, and it is also true in regard to pleurisy. The criterion by which we are to judge when it is proper for the patient to rise, take exercise and expose himself, is solely the result of physical examination, showing that all trace of local disease has passed away. We cannot be governed by the general symptoms, for these may subside in a most satisfactory manner, and yet the patient be far from being entirely cured. The care which has been insisted on in the acute stage should never be relaxed until the physical examination shows that all local change has passed away, unless, after pursuing a judicious course, and keeping up this care for a reasonable time, we find that the patient, in consequence of some constitutional defect or peculiarity, is passing into a chronic stage. Under such circumstances further confinement, instead of being a benefit, would probably injure the constitution. The patient is then to be treated as one with a serious chronic disease, and although he is allowed to go about it is under a most rigid hygienic regimen.

The consideration of the treatment of pneumonia demands more time than we can devote to it to-day. This man was treated in a way in which I think that you will treat most cases of this disease. When he was admitted, the disease had passed beyond the stage where depletion would be admissable. When the case is seen early, it is often well to use quite positive depletion, even if it is only local. In this case, there was no need for cardiac sedatives, but in many instances, when the patient is seen early, you will secure admirable results in limiting the inflammation and curtailing the inflammatory process by the use of veratrum viride or aconite. In order to assist the liquefaction of the exudation and stimulate expectoration, I know of no remedy equal to the carbonate of ammonia, especially if there is considerable vital depression. I consider quinine an almost essential element of the treatment of pneumonia, not in immense doses except when there is hyperpyrexia, but in doses of from eight to sixteen grains per day, given by the mouth if the stomach is perfectly tolerant, or by the rectum if it is not so. The diet is to be nutritious and the food given in small quantities and at short intervals. We are to be governed in the use of stimulants by the same considerations which control their use in other diseases. Many cases of pneumonia do very well without stimulants, and they should not be used as a matter of routine. We should wait for the development of symptoms, and when they are used, their effect should be carefully watched to see if they are doing what we wish before we continue them or increase the dose.

THE TREATMENT OF CHOLERA.

Dr. Alexander Harkin thus writes in the *Lancet*' August 19, 1884:

The disease and its treatment naturally divide themselves into three stages: the pulmonary or diarrhœal; the stage of violent purging and, vomiting and cramps; and that of collapse.

For the diarrhœa nothing in my experience answers so well as dilute sulphuric acid, which should be administered every hour in doses of twenty to thirty drops in some agreeable menstrum, with mustard or turpentine epithems to the abdominal region and iced water when available *ad libitum*. Should the second stage supervene, it is necessary to take decisive steps, lest the third rapidly develop.

It is in the second stage that my peculiar experience becomes available. Physiologists teach that the phenomena of vomiting and purging depend altogether upon the nervous mechanism of the organs affected. According to Michael Foster, "the dilatation of the cardiac orifice is caused, in part at least, by efferent impulses descending the vagi, since, when these are cut, real vomiting with discharge of the gastritic contents is difficult through want of readiness in the dilatation. Since the vagus acts as an efferent nerve in causing the dilatation of the cardiac orifice so essential to the act of vomiting, it is difficult to eliminate the share taken by the vagus as an afferent nerve carrying up impulses from the stomach to the vomiting centre" (pages 275-6). The influence of the vagus is thus demonstrated in the act of vomiting, both as an afferent and an efferent conductor of nervous

energy. Kolman, too, quoted by Hall,* has shown that the right pneumogastric supplies the whole of the small intestines. "This is an inhibitory nerve," he says; "and Moreau and Lauder Brunton have demonstrated that the division of all the nerve going to a portion of intestine is followed by the secretion of a fluid just like rice-water stools of cholera. May not the stimulation," Hall continues," of the inhibitory vagus be followed by results much the same as if the sympathetic supplying the small intestine were paralyzed?" In accordance with these physiological views, I have latterly treated every case of English cholera in the second stage by remedies applied to the pneumogastric nerve in the cervical region, with the satisfactory result of putting an end at once to the profuse vomiting and purging so characteristic of this stage. Arguing from its controlling effect in extreme cases of English cholera and cholera infantum, which our best authors say differ only in degree from the Asiatic type, I have every confidence that it will prove equally useful should the latter epidemic gain a footing in this country. There is another important indication, which will be subserved by counter-irritation over the vagus—viz.: the restoration of the cardio-inhibitory function of that nerve; thus the violent contraction of the heart will be controlled, the expansive power of its cavities restored, and the congestion of the pulmonary and arterial system put an end to. The application I have always used is the epispastic solution of the Pharmacopœia, applied freely with a brush behind the ear and on the neck as far as the angle of the lower jaw. No matter how violent the vomiting or purging I have never failed in stopping both by this application; a stimulating effect is produced at once and with it all gastric disturbances cease.

For the stage of collapse, which according to Claude Bernard, is due to great irritation and hypertrophy of the sympathetic nervous system, Dr. Hall, who has seen a large amount of cholera in India,† proposed to the Royal Medical and Chirurgical Society of London, on October 13, 1874, a plan of treatment which received the approval of the Society, as well as of Sir Joseph Fayer, who was present. He recommends the subcutaneous injection of a solution of chloral hydrate, 10 grains in 100 parts of water, in four or five different places according to the size of the syringe. If reaction does not commence in an hour, he injects again. The sedative soothes the contracted nerves and relaxes the contracted vessels; the blood is once more uniformly distributed, and consequently the pulse reappears at the wrist, the cramps and abdominal pains subside, sleep is induced, the respiration becomes regular, the discharges lessens, the face fills out, the voice becomes stronger, and the natural secretions are restored. Mr. Higginson, in his report to the Deputy Commissioner at Keri, Oude, states that he has treated nineteen cases of cholera according to Dr. Hall's method, of whom seventeen recovered, being about 89 per cent. of cures. For purpose of illustration I append a statement of two cases out of many which I have treated during last autumn.

Case 1. *English Cholera.*—Constable C——— sent for me on September 18, 1883, at 8.30 a. m. I found him in the act of vomiting, with small quick pulse, violent cramps, forcible palpitation of the heart, great debility, faintness, and coldness of the extremities. He was purged at frequent intervals and the dejections were of the rice-water character. He informed me that when on duty in the police-cells at 4 a. m. that day, he was attacked with profuse vomiting, followed in an hour by violent purging, with cramps, an attack occurring about every fifteen minutes. I did not order any medicine, but painted him at once in the hollow behind the ears down to the angle of the jaw with an epispastic solution, assuring him that he would not have any return of his symptoms. I visited him again at 10-30 a. m., and found him quite convalescent, not having any sickness or suffering, as I predicted.

Case 2. *Cholera Infantum.*—On September 24, 1883, I was summoned to see a child living in Upton street, Belfast, aged twenty months, at 11-30 p. m. I found it lying on its face across its mother's knee, with its arms and legs lying listlessly at either side; it was purging and vomiting at the same time. The child was almost pulseless, and was cold and feeble. The mother informed me that it had sickened at 6 p. m., and that it had vomited at least every quarter of an hour till the time of my arrival. She had attributed its illness to a mess of soup which it had taken the previous day. She had administered milk with lime water, without any benefit. I did not recommend any medicine, but having had the child placed on its back, I painted it with the blistering fluid behind both ears, informing the mother that from that moment both vomiting and purging would cease. Soon after the application of the remedy the child began to improve, the heat returned to the extremities, and at the end of half an hour it was fast asleep, when I left for the night. Calling at 10 a. m. the next day, I saw the child in its mother's arms, looking quite lively and well. As I foretold, both vomiting and purging had instantaneously ceased.

There is no need of multiplying examples; these two are the representatives of a great number, irrespective of cases of bilious vomiting and gastritis from alcoholism, similarly and successfully treated.

In the cases related I applied the remedy behind both ears; in several others I found the single application behind the right ear sufficient for the purpose; and this appears to me preferable to the double blister, as, from its powerful inhibitory effect upon the heart as well as upon the abdominal viscera, the modified application is perhaps the safer. In these cases of severe suffering any one can understand the satisfaction that is felt

* British Medical Journal, vol. ii, 1884, p. 600.

† Ibid, vol ii, 1874, p 254.

when he is justified in saying, "Permit me to apply this external remedy, and all your troubles will at once depart."

FLATULENCE.

Mr. T. Lauder Brunton, in the Lettsomian Lectures on disorder of digestion, delivered before the Medical Society of London (*Medical Press and Circular*), speaking of flatulence, says:

Flatulence is due to the presence of gas in the stomach and intestines, which sometimes rolls about producing borborygmi, or escapes upward and downward, producing eructations or crepitations. If the pyloric orifice be closed, the gas from the intestine will not escape into the stomach, nor gas from the stomach into the intestine; but if the pylorus be open, gas may pass freely from the stomach into the intestine, and *vice versa*. An analysis of gas from the stomach shows that it consists to a great extent of nitrogen and carbonic acid, in much the same proportion as the nitrogen and oxygen of air. It is therefore probable that most of the gas in the stomach consists simply of air which has been swallowed, but from which the oxygen has been absorbed into the blood, and has been replaced by a corresponding quantity of carbonic acid. We are very apt to forget that, although the mucous membranes in man are much specialized, so as to perform a particular function most efficiently, yet their power is not entirely limited to the one function. The diffusion of oxygen and carbonic acid just mentioned, through the walls of the stomach shows us that the gastric mucous membrane has, though to a very slight extent, a respiratory action; and it is possible that other gases may be absorbed, though to a slight extent, by the gastro-intestinal mucous membrane. Indeed, I need not say it is probable, because we know for a fact that sulphuretted hydrogen may be absorbed in this manner. Some authors consider that the gastro-intestinal mucous membrane may secrete gas in large quantities. However this may be—and I think that it does not occur very frequently—it is probable that an interference with the absorption of gases may be a not unfrequent cause of flatulence.

In patients who suffer from malaria, attacks of indigestion are sometimes preceded for two or three days by a tendency to flatulence without any other symptom. This may simply be due to disturbance of the stomach and intestines alone; but still I am inclined to think that in these cases the disorder begins in the liver, and not in the stomach; the portal circulation becoming obstructed first, and the gastric mucous membrane becoming congested secondarily. After violent exertion, such as quickly running up stairs, or trying to catch a train, one may observe that, at the same time that the heart is palpitating and the breathing becoming short and difficult, there is a great tendency to flatulence. A similar condition is also found in patients with cardiac disease, and my friend Dr. Mitchell Bruce has called my attention to the frequency with which such patients complain of "heart wind."

Another source of flatulence is the gas given off from the food in abnormal process of decomposition. The secretion of gastric juice in the stomach is deficient; the food will not be rapidly digested; the secretion, instead of being acid, is nearly neutral, or perhaps even alkaline, and fermentation may occur with evolution of gas. It is evident however, that considerable time is required to allow gas to be formed in any quantity in the stomach; and flatulence from this cause will not occur until some time after food has been taken. Gas, however, may pass into the stomach from the intestines and distend it, if the pylorus be open; and such distension may occur at any time, and is not necessarily dependent on the decomposition of food in the stomach

I am inclined to think, however, that the most frequent cause of flatulence in the stomach is excessive swallowing of air. There is little doubt that boluses of food may be swallowed without air; but some fluids, especially those of a tenacious character, such as pea-soup and saliva, appear to carry down a good deal. Moreover, it appears to me that when a small quantity of saliva is swallowed at one time it does not completely fill the pharyngeal cavity, and that air is actually swallowed along with it. This does not matter—probably it is even beneficial—if it be not carried on to too great an extent. But we can easily see that, if a person goes on swallowing air after a meal is over, or in the intervals between meals, flatulent distension of the stomach may readily be produced. The conditions which give rise to frequent swallowing of air, so far as my observation goes, are, (1) a continued flow of saliva into the mouth; (2) a sense of irritation or tickling at the back of the throat; (3) a feeling of acidity in the stomach, and (4) a feeling of weight or oppression at the epigastrium or across the chest.

IODOFORM IN THE TREATMENT OF GOITRE.

My object in these brief remarks is not to give the different modes of treatment for the various forms of bronchocele, but to detail a line of treatment in which I have met with remarkable success in the last four or five years.

The most common variety of bronchocele met with is a simple hypertrophy of the thyroid gland, either one or both lobes; and it is in these cases, whether they be acute or chronic that this treatment is especially applicable.

Case 1. A married lady, aged sixty, applied to me for the relief of a "swelling," of four years, duration, on the right side of her neck. Examination showed it to be a bronchocele involving the right wing of the thyroid gland.

Case 2 was a young lady, sixteen years old, who

had a goitre of two years' duration, involving the right wing and isthmus.

Case 3. Mrs. B., aged thirty-five, consulted me in the summer of 1882, giving the following history: About three years previous she had noticed a slight enlargement on the left side of her neck, which grew in about six months to the size of an ordinary walnut, and occasioned no serious inconvenience. It remained this size for about two years, when it began to slowly increase, and three months before I saw her began to grow very rapidly, so that by the time she came to me it extended from the median line of the neck to a point beyond the outer border of the sternocleidomastoid muscle, and projected at least two inches, occasioning so much dyspnœa as to prevent her lying down—very tender to the touch and producing considerable dysphagia. She had been advised to have an operation for its removal.

Case 4. A young lady school teacher. In this case the goitre was of recent date, having existed only about six months, and involved only the isthmus.

Case 5. A married lady, the mother of a large family. This goitre involved both wings of the isthmus, and was of six years' duration, during which time it had grown slowly but steadily, at times becoming exceedinglypainful; and during the last year her sleep had to be taken while sitting in an easy chair. There was considerable dysphagia.

Treatment: These cases were treated uniformly, except as regards the first. In that case the local treatment only was used; for, notwithstanding her age and manner of living, her general health was very good. This is not usually the case, for goitre is generally found in anemic subjects, especially if it be of long standing. The local application consists in applying twice a day with a camel-hair brush, over the whole extent of the swelling, a ten-per-cent solution of iodoform in collodion. In a few days after the coating begins to detach itself, the skin becomes very tender, when the application will have to be discontinued for a time. After this there is usually no more tenderness. In case 1 the treatment effected a permanent cure in two months. In the other cases I gave internally, three times a day, in addition to the local treatment mentioned, a pill containing three grains of iodoform and one grain of iron by hydrogen. This frequently, if continued for several weeks, produces slight nausea, which necessitates the discontinuance of the medicine for a day or two at a time.

The improvement as a rule, evidenced by a diminution in the size of the goitre, commences in about three weeks, and after that is steady. In case 2, the patient being very anemic, treatment was not discontinued for four months.

In case 3 the improvement was very marked. The tenderness was entirely gone by the end of the first week, and the swelling considerably diminished by the end of the third. At the end of the third month the goitre had entirely disappeared, and the treatment was discontinued.

In case 4 the goitre being very small and recent, the improvement was very rapid, the patient being discharged as entirely well at the end of the sixth week.

Case 5 was under treatment for a longer time than any of the preceding ones, being under constant medical supervision for six months; but at the end of that time was entirely free from any appearance of goitre.

These are typical cases of those we most frequently meet with, occurring both in young adult life and in old age. In none of them has there been the slightest return either of the goitre or of tenderness of the parts. The treatment, while very simple, is very effectual, and promises a very sure means of relief from an affection which seems to be rather on the increase, and certainly deserves a thorough trial in each case before resort is had to any operative procedure—*Dr. C. E. Beem, in N. W. Lancet.*

LEVIS' METALLIC SPLINTS. FOR FRACTURE OF LOWER END OF THE RADIUS.

We take the following description from an article by R. J. Levis, M.D., Surgeon to the Pennsylvania Hospital, and to the Jefferson College Hospital:

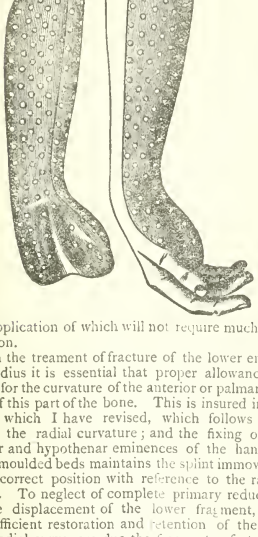
"In the usual and very characteristic fracture of the carpal end of the radius the primary line of the fracture is, with little tendency to deviation, *transverse* in direction. Associated lines of fracture are generally those of comminution of the lower fragment and are caused by the upper fragment being driven vertically into it and splitting it, usually in directions towards its articular surface. The displacement of the lower fragment is towards the dorsal aspect of the forearm its articular surface is inclined in the same direction abnormally presenting backwards and upwards.

"The mechanism of the fracture is its production by falls upon the palm of the hand, which, with the carpus, un lergoes extreme extension, and the fracture is caused by an *act of leverage or transverse strain.* This direction of force has also been called *cross breaking strain.* In this fracture actual displacement of the lower fragment may not exist at all, or it may be to the extent of complete separation from contact of the broken surfaces, varying with the amount of force applied and with the retaining influence of the surrounding dense structures.

"The first essential of the treatment of fracture of the lower end of the radius is *the complete reduction of the displacement.* The action of replacement must be directed to the lower fragment itself. The reduction of the fracture is usually be thoroughly effected, under anæsthesia, by *strong extension applied to the hand, associated with*

forced flexion of the wrist, and with pressure applied directly on the dorsal surface of the lower fragment. Unless vertical splitting or comminution of the lower fragments exists, the maintaining of partial flexion of the wrist, with pressure of a pad on the dorsal surface of the fragment, will prevent return of deformity.

"With the object of retaining the apposition of the fractured surfaces by overcoming displacing forces, I have practiced for many years on the principles involved in the splint here illustrated



the application of which will not require much description.

"In the treament of fracture of the lower end of the radius it is essential that proper allowance be made for the curvature of the anterior or palmar surface of this part of the bone. This is insured in the splint which I have revised, which follows correctly the radial curvature; and the fixing of the thenar and hypothenar eminences of the hand in their moulded beds maintains the splint immovably in its correct position with reference to the radial curve. To neglect of complete primary reduction of the displacement of the lower fragment, and to inefficient restoration and retention of the normal radial curve, are due the frequent unfortunate sequences of this fracture.

"The splint is made of copper, so as to be readily conformable by bending to suit the peculiarities of size and form of forearms. The slight roughness left on back of splint from perforations is for the purpose of keeping the bandage from slipping. It is nickel-plated to prevent oxidation.

"The splint will usually fit the forearm so accurately that but little padding will be required, and a piece of woven lint, or of cotton or woolen flannel is all that is necessary for its lining. No dorsal splint is needed, but, as before referred to, a small pad will in most cases be required over the dorsal surface of the lower fragment. For retention of the splint an ordinary bandage, two inches and a half to three inches wide, is all that is necessary.

"This splint has the merits of being applicable to all cases of fracture of the lower end of the radius, and also to many other injuries involving the forearm and wrist, and, as now supplied, is very inexpensive," the price being only one dollar for each piece. The splints are made in two sizes—for adults and children—and also to fit the right or left arm. As made by Mr. J. Ellwood Lee, of Conshohocken, Pa., (whose electrotypes we have borrowed for the above illustrations) the splints are flexible perforated and nickel-plated, and are very light and indestructible.

HEADACHE, SPINAL IRRITATION AND SYMPATHETIC NERVOUS AFFECTIONS DUE TO EYE STRAIN.

A Lecture by Edwin W. Hill, M.D., Cleveland, Ohio.

GENTLEMEN: I wish to draw your attention to one of the most important questions that comes before you in your daily rounds of practice, namely, the connection between the eyes and the nervous system.

At the first glance it seems absurd to think that the eyes have anything to do with the nerves, yet the more you think upon the subject the more important it becomes. The class of nervous diseases to which I wish to draw your attention are denominated functional; I like to call them sympathetic; they include headache, neuralgia, insomnia, epilepsy, spinal irritation, St. Vitus dance, nausea, vertigo, and general failure of health, both mental and physical.

They are called functional because the irritation is of a transitory nature and due to a disturbance of the circulation of the blood in the affected parts. Physiologists tell us that the circulation of the blood is controlled by the sympathetic nervous system. Please note these facts, for they are important:

1st. Headaches, epilepsy, insomnia, etc., are functional troubles, due to disturbances of the circulation.

2d. The circulation is controlled by the sympathetic nervous system.

3d. The eye in all its movements is controlled by the sympathetic, as, when the sympathetic is divided in the middle of the neck, the effect is almost instantaneous upon the eye, the pupil dilates, etc.*

Knowing the effect of division of the nerves in the neck upon the eye, is it not reasonable to say that irritation in the eye will affect the sympathetic in the neck. We know from the successful treatment of some hundreds of cases that it is a clinical fact. The chief causes of eye strain are astigmatism, hyperopia (far sight) and defective co-ordin-

* See Dalton's Physiology, pages 532-536.

ation, where there is a difference in the visual power of the eyes as well as errors of accommodation. If you wish to realize the strain of accommodation and co-ordination, hold this within three or four inches of your nose and read for five minutes when you will fully realize the nerve strain by the pain and perhaps nausea so induced. The pain will not be in the eye itself ordinarily. A remarkable fact, as given by writers upon eye strain, ( ) is, in the words of Dr. Mitchell, that while there may be no pain or sense of fatigue in the eye the strain is interpreted solely by the occipital or frontal headache. Some of the worst cases that I have treated and achieved the desired result, relief from pain and suffering, have been cases in which there was not the least sense of pain or fatigue in the eye.

The successful treatment of this class of nervous affections with the prism and cylindrical glasses requires a great deal of special study and clinical experience. It is equally true that the general practitioner is able to make a diagnosis of eye strain after his attention has been brought to the subject. (I shall be glad to send tests for astigmatism and defective vision to any one, free). It is unfortunate that the books published upon the eye contain so little upon this very important topic. Under the head of muscular asthenopia is about all that is said. Perhaps in no better way can I assist the practitioner than by giving a somewhat minute detailed history of cases treated by myself:

CASE 1.—H. S. C., æt. 14, is brought to me by his mother, who says that her boy, although naturally bright, does not get on well in his studies. After he has been in school part of a term he gets fretful, peevish and unnaturally irritable; his appetite becomes poor; and he does not sleep like a child, he is uneasy and tosses about in bed. After a little he complains that he is sick, his head aches and he feels bad. I examined the boy's eyes and found astigmatism, which I corrected with suitable cylindrical glasses which he wears at school. The mother has since told me that he was a changed boy in all respects—"he eats, sleeps and plays like a boy."

CASE 2.—Miss H. V., a self-educated and accomplished young lady, æt. 18, consulted me, complaining that she could not tell what was going to become of her. She was teaching school and the term was not quite half ended. She arose in the morning, after a night of very little sleep, and that little not of a quiet refreshing nature, but a troubled and dreamy sleep, with extreme fatigue and, as she expressed it, a feeling of dread that another day was upon her; before noon the pain in the neck and head would be severe, taking away her appetite for dinner, and what she did eat was forced. When night came the pain all along the spine would be so severe that she could scarcely bear the pressure of her clothing, and she was completely exhausted. Upon examination I found that her eyes were not alike in visual power and astigmatism in both, although of different degrees. With the proper glasses and wearing of them the pain disappeared and sleep returned.

CASE 3. Mr. L. A., æt. 48, a successful manufacturer, consulted me, and this is his history: "My brother and I commenced business years ago; I was to attend to the books and the finances; after making up the books for the month and making out the pay-roll I always had an attack of bilious sick headache, which nothing but a full night's sleep would cure, and that did not come the first night. Nothing that I could take did any good. I have tried everything.

Upon examination I found right eye normal; left eye, astigmatism 1-60. I gave him glasses. His bilious sick headache came from the continual eye strain, in making up his books, as was proven by his not having them when the strain was removed.

I will close, using the words of Dr. Jones of the Queen's University, Cork, Ireland. "How many an unfortunate might escape a world of drugging if the practitioner could recognize the effects of astigmatism in the headache, the dizziness, the inability to work, symptoms so often referred to the stomach, all corrected by suitable glasses."—*Cincinnati Lancet.*

1. Borders on the Eye, page 260.
S. Weir Mitchell, American Med. Journal, 1874

SICK HEADACHE.

By FRANCIS F. BROWN, M.D., BOSTON, MASS.

From the Boston Med. and Surg. Jour., Oct. 25, 1884:—Sick headache, migraine, is a neuralgia. This is not the popular impression. Sufferers from it attribute it to "biliousness." This is not only the popular belief, but it was the doctrine of the systematic works until not many years since.

That this disorder is a neurosis is evident from the behavior of the attack, its change in subsequent years into ordinary neuralgia, its local effects in some cases, and its hereditary character and connection, with other neuroses.

First. I think no one can watch closely an attack of sick headache, especially if in his own person, without seeing evidence of its neuralgic character.

To begin with, there may be up to the time of the onset not the slightest symptom of gastric or hepatic derangement. Persons subject to sick headache have usually premonitory symptoms which tell them an attack is impending, and are usually the same in the same person. Some of them are sudden noises in the head, flashes of light or globes of fire before the eyes when they are closed, black spots, an appearance like a gauze veil quivering, ability to see only half an object, sleepiness, etc. Whatever they are the patient knows very well what they mean. In a large majority of cases the whole course of the attack is passed through between sunrise and sunset or a little later. Some, however, and these are usually the hereditary and severer cases, suffer for two or

three days of extreme wretchedness before the storm blows over.

It is evident that this is something very different from the headache which is consequent upon gastric and hepatic derangement only.

Second. The neurotic character of sick headache is shown by its gradual change with the increasing age of the patient into ordinary neuralgia, preferably of the ophthalmic branch of the fifth nerve.

Third. Another fact, as given by Anstie, showing its neuralgic character, is the results which sometimes follow on the track of the fifth nerve, which is the nerve most affected, and the seat of greatest pain, namely iritis, ulceration of the cornea, blanching of the hair or eyebrow, local anæsthesia and periostitis of the frontal bone.

The four latter of these occurred in Dr. Anstie's own person: the local anæsthesia remained permanent.

Fourth. Another point showing its character is the family relations of the disease. That it is often hereditary, we all have had opportunities of observing; and the most intractable cases are among those who have had neurotic ancestors.

Sick headache is more frequent in women than in men, in those who are the subject of other neuralgias than the opposite, and in general is a disease of debility. To this latter statement there are apparent marked exceptions. Occasionally we find a subject of it who carries the appearance of robust health. My impression is that these cases usually belong to families who are subject to it or the allied neuroses.

The immediate occasion of an attack may be anything which tends to exhaust the system, especially overwork, which wearies the body while it taxes and worries the mind, and loss of sleep.

Any slight deviation from one's usual routine, like a shopping excursion, or late hours, loss of a meal, or eating at an unusual hour, will induce an attack in some persons. In typical migraine I think exhaustion or loss of sleep is the occasion of ten attacks to one where indigestion is the cause.

In treatment we aim, first to avert an impending attack; second, to put the system into such condition as to render it less liable to one.

First to avert an impending attack, the most efficient remedies are guarana and caffeine.

Thirty grains of the powder, or a teaspoonful of a good fluid extract of guarana, or three or four grains of caffeine, should be given every twenty minutes or half hour till three doses are taken, unless the symptoms sooner show signs of abating. This is a point I wish to emphasize strongly; it is the key to their successful use, namely to give full doses, and to give them in the very first threatenings of an attack.

Attention to some minor points may aid in averting an attack. When the patient has undergone any unusual fatigue or loss of sleep, anything which his own experience leads him to suspect will be followed by sick headache, I think, I feel quite sure, that a full dose of bromide of potassium, thirty to sixty grains at bed-time, will lessen his liability to it. This drug is useless, it seems to me, after the attack has begun. Under the same circumstances, if the patient is at all constipated, an aloetic laxative is serviceable.

So trifling a matter as slight constipation appears at times to turn the scale under these circumstances.

Of more importance than to repel a single assault is it to so fortify the system that none will be made. How to do it must be left to the judgment of the physician in view of the needs of each individual case. Every drain and tax and irregularity that the patient has learned by experience invites an attack must be looked after and stopped. Loss of sleep and irregular hours must be prevented.

I wish to add a few words about the use of cannabis indica. In this drug I believe we have a remedy of great value in migraine. My attention was particularly called to it by an article in the *New York Medical Record* of December 8, 1877, by Dr. Seguin, who says that in doses of one-third to one half grain of good extract, thrice daily, continued for months, not less than three, it diminishes in a marked degree one's liability to these attacks. My experience has been quite limited, but I have had a few patients whose improvement from its use, after the failure of tonic treatment alone, has been very marked.—*Quarterly Epitome.*

THE TREATMENT OF WHOOPING COUGH.

Although we have so many unsatisfactory recommendations for the treatment of this intractable disease, yet we deem it well to reproduce from the *Medical Press*, September 24, 1884, the treatment advocated by Dr. Robert J. Lee, who says:

It is to be feared that experiments in treatment will not lead to any satisfactory results. It is better not to indulge in any idea of discovering a specific for this disease. Any one who expresses a strong view on the value of some particular remedy, may reasonably be suspected of insufficient observation and experience. In practice the best plan is to divide your attention between the general and the local symptoms, or rather to treat them separately. By the local symptoms I mean the laryngeal spasm, and for this the treatment must be chiefly local. Among the local remedies there is none which gives more decided relief than the inhalation of carbolic acid, a combination such as is used in this hospital, of carbolic acid, oil of pine and tincture of benzoin. Alum is a popular remedy with honey, and this acts apparently locally. Bromide of potassium and tincture of belladonna iv. to v. grains of one with iv. to v. minims of the other, seem to diminish the laryngeal irritability for a time, but in severe cases no great benefit is derived from them. As regards the general treatment we have to consider the symp-

toms of fever, and wasting. Ipecacuanha, small doses of antimony, quinine, and cod liver oil are the chief agents which may be employed in the relief of these symptoms. The great value of change of air, particularly from London or inland to the sea, is well known, and in the latter stage of the malady is superior to any medicinal remedy.

"I will conclude these remarks with the routine treatment, if I may use such a term, which in the majority of the large number of cases I generally adopt. If the disease is in the early stage I prescribe from half a drachm to a drachm of the mistura potassi bromidi et belladonna of our pharmacopœia, with an equal quantity of mistura oxymelli scillæ, and order the application of turpentine liniment every night to thorax and back; and the inhalation, when possible, of the fumes of Stockholm tar, obtained by gently heating the tar or stirring it with a hot poker. This is an economical and effective plan of treating the spasm. In the later stage of the disease the bromide and belladonna mixture should be given only at bedtime, and during the day small doses of cod liver oil and iron will best repair the condition of wasting.

"As the mortality from whooping cough is much greater in infants under twelve months than in children above that age, it is well to protect the former as much as possible from any risk of infection."

SPECIFIC TREATMENT OF DIPHTHERIA AND CROUP.

Dr. George A. Seyan, of Monongahela City, Pa., read a paper at the last meeting of the American Medical Association (*Jour. Am. Med. Association*) upon this subject. He recommended bichloride of mercury as a specific for diphtheria and chloride of gold for croup.

The bichloride of mercury should be used in the first stage of diphtheria, and in large and frequently repeated doses, and not after everything else has failed. The effect of large doses of this remedy in the early stage of the disease is to reduce the temperature, relieve pain in the head, back and limbs, unlock the secretions, lessen the soreness in the throat in time to relieve nausea and vomiting, restore appetite, and, most of all, to prevent the generation of the poison in the membrane, and to check the formation of the membrane, or to cause it, if formed, to speedily disappear. It is best given in solution, so that when excessive nausea is present, the dose may be gradually lessened and the time shortened, giving the stomach a chance to dispose of it, but at the same time keeping up full treatment.

The dose should be, for a child three years old, one-sixteenth to one twelfth of a grain in a teaspoonful elixir of bismuth and pepsin every three hours, and for an adult one-twelfth to one-eighth of a grain every three hours. The remedy rarely disturbs the stomach, does not produce ptyalism, and seldom acts on the bowels. Under its use, commenced early, an ordinary case is convalescent in three days, and it rarely needs to be given longer than five days.

In croup the chloride of gold acts as a specific. It should be given in solution in distilled water. As it is very deliquescent and difficult to weigh, the druggist may dissolve the contents of a fifteen-grain bottle in fifteen drachms of distilled water, and to a child five years old, one to three drops of this may be given in water every one to three hours. In other words, the dose may be one-fiftieth to one-twentieth of a grain. It should not be administered in silver or other metal spoons, but dropped into a glass with a little water. Remarkable effects are reported.

CONSTANT CRYING IN AN INFANT.

Dr. Theophilus Parvin touched, in a recent clinical lecture, published in the *College and Clinical Record*, on this subject—one usually held to be scarcely worthy of the physician's notice, but nevertheless important. The child under examination was four months old, and had cried night and day since its birth.

As a dog hunts in dreams, so this poor child, if it ever dreamed in its sleep, dreamed of crying, of pain and discomfort. It was hard, impossible indeed, to keep it still during the examination made to ascertain if there was any diseased organ making complaint in crying. Having found that the child is not suffering with positive disease, the next question is as to its nourishment. The mother said she had plenty of milk, quite as much as she had with her first babe, which got on well. Nevertheless this babe did not seem as large and as plump as it ought to; and though the quantity of milk was ample, was its quality such as it ought to be? Putting a drop on his finger-nail held obliquely, and letting the milk run down the nail the doctor found it scarcely left a trace remain, dropping it in a tumbler of water, each drop, as it fell, caused the faintest cloudiness. Finally a clinical assistant, made an examination with the microscope, and found the number of milk globules was very small. Thus a solution of the problem was reached; the infant was crying from hunger, and from hunger it had been crying for weary months. That this solution was correct is proved by the result of feeding the baby. In a few days it became quite happy and improved in appearance. The artificial food given this infant was cow's milk diluted with an equal quantity of barley water, and a little loaf sugar added. The practice of diluting cow's milk with water for infant feeding is, Dr. P. believes, a grievous mistake. That sort of dilution has simply rendered the milk less nutritious, and made it necessary to give a larger quantity of food, and at more frequent intervals, in each way impairing the child's digestive power. In this case, not water, but barley water, was added

to the milk. So much depends upon having the barley water properly prepared that a word about this preparation is necessary :

Take an ounce of pearl barley, and wash it in cold water, then put it in a vessel containing half a pint of water, and let it be gently heated over the fire, so that the water just simmers a few minutes; now pour off this water, replace it by a pint and a half of water, and boil down to a pint, and you then have barley water.

BELLADONNA INJECTION FOR GONORRHŒA.

Some thirteen years ago an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa with intense pain on micturition, and intolerable chordee at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grain extract belladonna ten grains powdered opium a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning having had no chordee that night, and the pain of micturition disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and I have used the injection in every instance, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordee at night. With the application of the belladonna and opium ointment the chordee did not appear, and in four days after using the injection the running ceased, but after the first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always stated that it is the injection, and not the ointment, which stopped the chordee. I have tried the anodyne treatment in various classes of people from the dissipated nymphs of the Eastern bazaars to the well-fed *roué* in the West; in the acute and in the chronic and gleety stages; in first attacks, and in those making one of a series; and in cases complicated with inflamed testicles and chordee; and I have no hesitation in saying that I have not witnessed anything to contraindicate it nor to mitigate its success.—John Roche, M. D., in *Medical Press.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, APRIL, 1885.

CHOLERA.

A special meeting of the Medico-Chirurgical Society was held in this City some weeks ago to consider a proposed Health Bill for the Province, and to recommend suitable precautionary measures in view of the possible advent of cholera next summer. Besides a full meeting of members, there were present Dr. Larocque City Health Officer, the President and several members of the Board of Health, and Mr. Archambault who has charge of the proposed Health Bill. After a lengthy discussion a Committee was appointed to consider the Bill, and report upon it and the Cholera question.

The Committee propose to urge upon the Quebec Government the necessity of passing at once such a comprehensive Health Bill as will secure uniformity and efficiency in working, and will not only empower municipalities to undertake sanitary reform, but will *compel* them to do so. A Provincial Health Board would be a leading feature in such a scheme.

It is also proposed to direct the attention of the Dominion Government to the necessity of passing stringent quarantine regulations and arranging for their thorough and systematic enforcement. But the best quarantine system will never prove adequate or satisfactory, as long as the medical service on board passenger ships remains inefficient and irresponsible, as at present. Steamship companies appoint their own surgeons, pay them badly, change them frequently, and give them no independent authority. If a man is honest but in-

discreet enough to find fault with existing arrangements and suggest improvements— necessary but inconvenient or expensive— he is quietly dismissed and replaced by one who is less particular. A ship's surgeon should be a *Government Health Officer*, appointed and dismissed by the Board of Trade, responsible to it for the health of the passengers and the sanitary condition of his ship, and in such matters independent of the Captain and other officers. The formation of a Merchant Medical Marine Service under Government control would greatly improve the quality of the service, and give valuable aid in preventing the spread of infectious diseases. The Government has an efficient *postal* marine service, independent of the steamship companies and their officers, why not have a Government marine *medical* service? Should not the lives of our people and the prevention of epidemic disease be matters of as much solicitude to the Government as the safe transit of our letters and papers.

This whole question has been fully discussed in Great Britain,-1882, 3-4, and has been the subject of parliamentary agitation. To Dr. J. A. Irwin, now of New York, belongs the credit of first directing public attention to the evils and abuses of the present system. The medical journals kept up the agitation, and strongly advocate reform, prominent among them being the *British Medical Journal, Lancet, Medical Press, Medical Times* and *Gazette*. By the non-medical press, opinions equally strong were expressed, especially by the *Daily Telegraph, Manchester Courier, Irish Times, Freeman's Journal, Liverpool Mercury, Nautical Gazette, Gaillards Journal*, and the *Graphic*. The British Medical Association took up the question, and in March, 1883, its Parliamentary Bills Committee drew up a memorial, which was laid before the President of the Board of Trade by an influential deputation accompanied by Sir Lyon Playfair and twenty other members of Parliament. The movement secured the interest and active co-operation of many eminent men, such as Sir Lyon Playfair, Sir Eardley Wilmont, Herbert Gladstone, W. E. Forster, Sir Thomas Farrar, Ernest Hart, Baron Henry de Worms, Sir Saul Samuel, Sir John Lubbock, Professor Huxley, Sir Spencer Wells, Sir William McCormack, Sir Edward Reed, and the Duke of Beaufort. The Government promised to consider the question, but its attention has been so much occupied with other matters that legislation has not yet been accomplished.

In 1883 the American Medical Association at its Cleveland meeting appointed a committee to consider the regulation of emigration by Congress. A Bill was drawn up and laid before the National House of Representatives, but has been referred back to the committee for amendment. The American medical and non-medical papers advocate reform as strongly as their English contemporaries, particularly the *N. Y. Medical Record, Boston Medical and Surgical Journal, N. York Daily Tribune, New York Herald*. It is everywhere conceded that reform is necessary; and if quarantine regulations are to be properly carried out, the medical examination of passengers at the port of embarkation, their treatment and supervision during the voyage, and their inspection before landing *must* be made harmonious parts of a uniform system of medical service, not independent and sometimes conflicting, as at present—

We print elsewhere the memorial of the British Medical Association, and an article from the N. *Y. Evening Telegram*, giving Dr. J. A. Irwin's views upon the precautions which should be taken against cholera.

PRECAUTIONS AGAINST CHOLERA.

I have studied that disease in India its hot-bed and watched its spread through several epidemics, and I consider it by no means unlikely that it may reach New York through the summer or fall of next year, as cholera once started on its march often retains its vitality for a couple of years. The weak point of our defence lies in the now notorious inefficiency of the medical service on board passenger ships. On each side of the ocean there is an excellent health service, but the ocean passage is virtually ignored. The united medical opinion of both countries is loud in its denunciation of this evil. Last year, at the instigation of the British Medical Association, a strong deputation, including twenty members of Parliament, urged the President of the Board of Trade in England to introduce a Bill covering that point. The Cabinet Minister promised much and did nothing. The American Medical Association some time ago drafted a Bill for the same purpose, which is now before Congress, but which, notwithstanding the able engineering of General Slocum, is likely to end in nothing. Ships' surgeons are now responsible to the owners, and I could quote a large number of instances in which an attempt on the surgeon's part to do his duty to his patients or to the public

has been followed by dismissal. For obvious reasons, the owners desire to hush up cases of infection. For equally obvious reasons ship surgeons humor this desire. Therefore at present the only protection against the introduction of diseases such as smallpox and cholera, lies in a stringent quarantine. But the period of incubation for smallpox is from seven to sixteen days, while that of cholera is not accurately determined, but is set down from a few hours to fourteen days. If it be true, as Surgeon-General Hamilton lately said that "every possible advantage is taken of the boarding officer" to conceal cases of infection, the time that the voyage has taken cannot be counted as equivalent to quarantine. That must begin when the vessel arrives, and then the requirements of health and the convenience of commerce come into conflict. A sixteen days' quarantine for every vessel arriving would be impossible. As a matter of fact, quarantine is exceedingly lax, many vessels with smallpox on board being granted pratique on the passengers being vaccinated. In the case of cholera there is an additional uncertainty on account of the difficulty of distinguishing it from cholera morbus. An experienced ship's surgeon might mistake the one for the other, and give a false report, however honest he might be; and although there are some first-class men in the service, it is well known in the profession that first-class men, as a rule, will not at present take the position of ship's surgeon and be creatures of the owners. I have myself been a ship's surgeon in two of the great transatlantic lines, and I thoroughly understand the situation. What is required is that the ship's surgeon shall be completely independent of the owners, and of the owner's paid servant, the captain. He should be responsible, as far as his medical service goes, (which means the retention of his position) only to the health authorities on either side, who are perfectly willing to pull together. To say that there would be then a conflict of authority no board ship in that case is nonsense, both theoretically and practically—theoretically because the captain's supreme authority on board ship under the law is that of a magistrate whose functions need not clash with those of a surgeon on board ship, if both were properly defined, any more than do the functions of magistrate and surgeon on land. It is in his quality of representative of the owner that the Captain does the mischief, for if the surgeon displeases him by too honestly discharging his duty, the captain reports him and has him discharged, not as a magistrate but as the owner's agent. The danger of conflict of authority is practically disproved by the experience of the British Colonial Immigration Service, in which the ship's surgeon is appointed by the Board of Trade and can not be dismissed by the owners. The position is one of dignity, and there is therefore no difficulty in getting excellent men to fill it. The positions of the surgeon and the captain in that service being clearly defined by law do not clash, and, as matter of fact, disputes of any kind are as rare between them, as between the Captain of a transport and the colonel of the regiment being transported. The effect of making the embarking, the voyage, and the disembarking all parts of one medical service is to make the whole efficient. The effect of the present lax medical supervision on board ship is to create carelessness on both sides of the ocean, for nothing disheartens a man so much as to know that, however conscientiously he may perform his duty, his work may be spoiled by the negligence or dishonesty of another.—

Dr. I. A. Irwin, in N. Y. *Evening Telegram.*

Dec. 22nd, 1884.

THE MEDICAL SERVICE OF ATLANTIC STEAMSHIPS.

MEMORIAL OF THE PARLIAMENTARY BILLS COMMITTEE OF THE BRITISH MEDICAL ASSOCIATION.

To the Right Honorable Joseph Chamberlain, M.P., President of the Board of Trade:

This memorial respectfully sheweth that the medical and sanitary administration of ocean steamers, especially of those engaged in the North Atlantic emigrant trade, is often seriously defective, whereby many lives are annually sacrificed. The following reasons may be assigned:

1. The medical officers are appointed without due regard to age, health, professional qualification or character.

2. They seldom retain the position for any considerable period, and there is no organisation through which the results of their collective experience may be turned to practical account.

3. The sanitary arrangements of passenger-ships are, without exception, far from what they should be; they are very often grossly defective.

4. The medical officer is denied such independent authority in sanitary matters as is essential to his efficiency as a sanitary officer.

5. His duty with reference to these matters is uncertain, and varies upon almost every vessel. His responsibility is entirely undefined, but he knows that any interference upon his part with existing customs or arrangements would be unwelcome to his employers, and would very likely bring him into unpleasant contact with more influential officials, thereby compromising his position while on board, and the tenure of his office at the conclusion of the voyage.

6. As a consequence, sanitary precautions are not unfrequently, sometimes habitually, neglected throughout the voyage.

7. The surgeon is not allowed adequate assistance for the proper care and treatment of the sick. He has no hospital steward or sick nurse, no dispenser, and no servant; and consequently miscellaneous duties devolve upon him, which he cannot possibly perform efficiently during the frequently recurring times of general sickness, and some of which are distinctly derogatory to his position as medical officer of the ship.

8. The hospitals are generally insufficient, often ill-placed, and sometimes taken from the surgeon's control, and devoted to other purposes than the accommodation of the sick.

9. The medical officer is usually allotted quarters without regard to his health, personal comfort, or the possibility of efficiently discharging his professional duties.

10. His tenure of office is uncertain, often depending on the mere caprice of other officials.

11. His salary—never more than £10 per month, and usually on a par with that of the cook, steward, and fourth or fifth engineer—affords inadequate remuneration for competent and experienced medical services. There is no provision for retirement or superannuation; and therefore, when, after years of laborious public service the ship-surgeon loses his position from ill-health or otherwise, through no fault of his own, he finds himself without provision for the future, and, with reference to other chances of employment, in every respect worse off than when first he obtained his diploma.

Under these circumstances, it is not surprising that, as stated by a leading medical journal, "comparatively few surgeons in every way suitable" can be found in the Mercantile Marine service; or that it should have been ascertained, that the mortality among passengers is "far higher than is justified by the necessities of transit."

As a remedy for this unsatisfactory state of affairs, your memorialists respectfully propose:

1. That the Board of Trade should obtain powers to take this important branch of the public service under its own immediate direction.

2. That a regularly constituted "Marine Medical Service" should be formed; the members of which would be appointed under the direct supervision of the Board and would be responsible to it for the efficient performance of their duties.

3. That the conditions of such appointment should be reasonably stringent, in view of the serious and difficult nature of the service required.

4. That the present disabilities, with reference to unsuitable accommodation, want of assistance, and inadequate remuneration, should be amended under the direction of the Board; and that the position should be made sufficiently desirable to attract and retain the services of thoroughly competent and experienced medical men.

5. That the duties, responsibilities, status and uniform of marine medical officers should be distinctly determined, and made constant upon vessels carrying passengers under the supervision of the Board of Trade.

6. That the medical officers should have separate authority in sanitary matters, not involving the safety or general discipline of the ship.

7. That he should be assured of the full protection of the Board in the discharge of his duties, and in all cases of vexatious interference, or unfounded complaint.

8. That his tenure of office should be as permanent as other public services, and not simply from voyage to voyage, as at present.

9. That the conditions of the service should include promotion and provision for superannuation or retirement through ill-health.

10. That a junior or assistant-Surgeon should be carried by every vessel having on board more than 600 persons; and that suitable arrangements should be made for his accommodation and remuneration.

11. That the medical officers should be required to frequently inspect the inhabited portions of the vessel, and to furnish at the conclusion of each voyage a suitable report upon the hygienic conditions of the voyage, and upon all matters likely to affect the health of the passengers. [Such reports, taken collectively, would be of great value in the public service.]

BISHOP'S COLLEGE FACULTY OF MEDICINE.

ANNUAL CONVOCATION.

The fourteenth annual convocation of the Medical Faculty of Bishop's College was held in the Synod Hall, Montreal, on the 1st of April. In spite of a most disagreeable day, the rain falling in torrents, a very considerable assembly was present, a large proportion being ladies. The Hon. Chancellor Heneker occupied the chair, and conferred the degrees. Dr. F. W. Campbell, the Dean of the Faculty, read the following:

REPORT OF SESSION, 1884-5.

The number of matriculated students for the Session 1884-5 is 23, of whom 2 come from the United States, 2 from Ontario, 17 from Quebec, 2 from West Indies. Eight of our students are residents of Montreal.

The following are the results of the Examinations.

Botany.—F. H. Pickel, Frederick Taylor, John P. McLaren.

Practical Chemistry.—V. J. Groulx and F. Taylor, equal; Rollo Campbell, S. A. A. Thomas, W. E. Fairfield.

Practical Anatomy.—V. J. Groulx, R. Campbell, J. Rohlehr, W. E. Fairfield, A. P. Scott.

Anatomy.—1st Class, V. J. Groulx, W. E. Fairfield, R. Campbell.

2nd Class—A. P. Scott.

Pass.—John Rohlehr.

Physiology.—1st Class—W. E. Fairfield, A. F. Longeway, R. Campbell.

2nd.—A. E. Phelan, V. J. Groulx.

Pass—A. P. Scott, S. A. A. Thomas.

Materia Medica and Therapeutics.—1st Class—V. J. Groulx, A. F. Longeway, R. Campbell.—2nd Class.—A. E. Phelan.

Chemistry.—1st Class.—W. E. Fairfield, V. J. Groulx, A. E. Phelan, R. Campbell, S. A. A. Thomas.

Pass.—J. Rohlehr.

Hygiene.—1st Class—W. E. Fairfield, R. Campbell, V. J. Groulx.

Pass.—A. P. Scott, S. A. A. Thomas; J. Rohlehr and B. J. Ambrosse, equal.

Medical Jurisprudence.—1st Class.—A. F. Longeway.

The following gentlemen have passed their primary examination, consisting of Anatomy, Physiology, Materia Medica and Therapeutics, Chemistry, Hygiene, Practical Anatomy and Practical Chemistry.—

Albert F. Longeway, Dunham, P. Q.—1st Class honours, and "*David Scholarship*" (awarded to the student who takes the highest number of marks in the primary examination.)

Vilda J. Groulx, Belle Riviere, P. Q., 1st class honours.

Rollo Campbell, Montreal, 1st class honours.

Albert P. Scott, Montreal, 2nd class honours.

The following gentlemen have passed their final examination for the degree of C.M., M.D., consisting of Practice of Medicine, Surgery, Obstetrics and Diseases of Children, Gynecology, Pathology, Medical Jurisprudence, Clinical Medicine and Clinical Surgery:—

Frank R. England, Dunham, P.Q., 1st class honours, and "Wood Gold Medal" (awarded to the student who has attended at least two six months sessions at Bishop's College, and has obtained the highest aggregate marks in primary and final examinations).

Rev. Jabez B. Saunders, Stanstead, P.Q., Chancellor's Prize, for best final examination, the Wood Gold Medalist not being allowed to compete.

Charles E. Parent, Waterloo; *Clarence R. Gillard*, M.R.C.S., L.S.A., Jamaica, W. I. The "Robert Nelson" Gold Medal for special excellence in Surgery is awarded to F. R. England. This medal founded by Dr. C. E. Nelson of New York is awarded annually to the student standing first in a special examination in Surgery, written out and practical. No one is allowed to compete unless he has attended at least two sessions at Bishop's College, and has obtained first class honours in primary and final examinations.

In order to pass in any subject, a candidate must obtain at least 50 per cent of the maximum marks; second class honours require at least 60 per cent; first class honours, at least seventy-five per cent.

PRIZE LIST.

"Wood" Gold Medal and "Robert Nelson" Gold Medal—F. R. England.

Chancellor's Prize—Rev. J. B. Saunders.

David Scholarship—A. F. Longeway.

Practical Anatomy—V. J. Groulx.

The degrees having been conferred, Dr. J. B. Saunders delivered the valedictory on the part of the graduates and Dr. A. Lapthorn Smith addressed the graduates on the part of the Faculty.

McGILL UNIVERSITY—ANNUAL CONVOCATION.

The annual convocation of the Medical Faculty of McGill University took place on Monday afternoon, March 30, in the William Molson Hall.

The total number of students enregistered in this Faculty during the past year was 234, of whom there were: from Ontario 126; Quebec, 58; New Brunswick, 20; Nova Scotia, 11; United States, 8; P. E. Island, 3; Newfoundland, 3; West Indies, 2; British Columbia, 1; Manitoba, 1; Ireland, 1.

The following gentlemen, having fulfilled all the requirements to entitle them to the degree of M.D., C.M., from the University, had it conferred on them. In addition to the Primary subjects mentioned they have passed a satisfactory examination, both written and oral, on the following subjects:—Principles and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children, Medical Jurisprudence, Pathology and Hygiene, and also Clinical Examinations in Medicine and Surgery conducted at the bedside in the Hospital:

Arthur, R. H., Brighton, O.; Allan, J. H. B., Montreal, Q.; Baird, T. A., Chesterfield, O.; Burrows, F. N., Drayton, O.; Cassidy, Geo. O., Goldstone, O.; Daly, Walter S., Ogdensburg, U.S.; Corson, Douglass, Woodstock, O.; Darey, J. H., Montreal, Q.; Dazé, Henri, Montreal, Q.; Doherty, W. W., Kingston, N.B.; Elder, John, Huntingdon, Q.; Eberts, D. W., Chatham, O.; Finlay, F. G., Montreal, Q.; Harkin, F. McD., Vankleek Hill, O.; Hallett, E. O. Truro, N.S.; Hurdman, H. T., Aylmer, Q.; Gustin, Smith, London, O.; Hanna, A. E., Harlem, O.; Hawkins, A. C., Halifax, N.S.; Irvine, R. T., Carp, O.; Johnson, H. D., Charlottetown, P.E.I.; Klock, W. H., Aylmer, Q.; McMeekin, J. W., St. Catharines, O.; McGannon, M. C., Prescott, O.; McCormack, N., Pembroke, O.; McDonald, H. J., Alexandria, O.; McMillan, D. L., Alexandria, O.; Powell, F. H., Ottawa, O.; Palmer, G. F., Ottawa, O.; Robertson, A. M., Brockville, O.; Shibley, J. L., Yarker, O.; Wishart, D. G., Madoc, O.; Wilson, J. A K., Manotick, O.; Wood, Edwin Geo., Londesboro, O.

Local and General.

Montreal has been honored by the selection of Dr. Osler to deliver the Gulstonian lecture this year. We can only regard him as transplanted to the congenial soil of the University of Pennsylvania. In his three lectures he refers continually to the Montreal General Hospital and to his colleagues there. Those who take the Philadelphia *Medical News* will find a verbatim report of this original description of malignant endocarditis.

To read the newspaper reports one would think that General Grant was on the road to recovery. We, who know the true state of the case, can distinguish between a *stay* in the progress of the disease and the improvement which precedes complete restoration to health. The local application of cocoaine has given him much relief, but the destruction of the tissues of the pharynx goes slowly on. The disease resembles the soft epithelioma which sometimes affects the æsophagus. There is not much induration and little pain. No doubt it is the absence of the latter symptom which has raised the hopes of the General's friends.

Fabrini of Palermo (*Centralblatt für die Medicinische Wissenchaften*) has given us something new. He proposes to substitute for the ordinary transfusion of blood the extraordinary *inhalation* of the same. This is how it is done: a mixture of twenty per cent of bullocks' defibrinated blood and eighty per cent. of a very dilute (¾ per cent) solution of sodia chloride is sprayed into the throat of the patient. Three ounces and a half of this mixture may be inhaled at one sitting; it does not produce coughing, does not raise the temperature nor bring about any perceptible alteration in the circulation or respiration, and auscultation shows that it is very soon absorbed.

Professor Fabrini has tried this method in several cases of oligæmia with the best results. The patients' condition improve, there was a decided increase in the relative number of the red corpuscles and in the quantity of hæmoglobin. Of course we shall be obliged to have more extended trials of this novel method of blood-making before we can pass judgment on it.

I suppose I might claim relationship with *Zadkiel* and Vennor, *et hoc genus omne*. I predicted nearly three months ago that an outbreak of small pox was at hand, and, lo! it appeared shortly afterwards.

Strange that this city should be the objective point of this dreaded disease every few years.

Doubtless it illustrates that mysterious law which V morbilli, scarlatina, pertussis, etc., also governs the periodic visits of. I fear that, in spite of all the precautions which the authorities may take, the infection will, as usual, spread to all parts of the city, and that our Civic Hospital, so long closed, will again have a season of active usefulness.

I wish I could pass the subject over with this slight allusion, but, in spite of Dr. Hingston's letter to the *Gazette* (April 18) I am afraid that somebody is sadly to blame for the spread of the disease. Didn't Dr. Rodger inform the Hotel Dieu officials that the patient he was sending thither was the subject of variola, and that he had just been exposed to the disease? Was it not well understood that the General Hospital authorities had very properly refused to admit him, because every one knew that he was carrying small-pox about with him?

Again, how many medical men will be convinced by Dr. Hingston's statements that the epidemic now prevailing arose *sua sponte*, and had no necessary connection with the case "about whom the physicians in attendance were not unanimous?" Surely, we cannot be expected to believe that with a case of small-pox already in the hospital, to which probably sisters, servants, friends, attending physicians and others had access "before a sister and a servant had been detailed to wait upon him," other cases should be regarded as arising from unknown causes?

The imported and first case was not isolated at all, in the proper sense of the word, but nearly two weeks afterwards when a servant in a "distant" part (why *distant* part? does Dr. H. wish us to understand that variola cannot travel 300 yards in the fortnight?) of the Hospital took the disease then she is placed in a building outside of the Hotel Dieu, the health authorities are communicated with, and the disease finally infects the whole Hospital, which is, very properly, closed.

The *British Medical Journal* tells us how to make artificial cheese. Skim milk and oleo-margarine are made into an emulsion and the resulting cream (?) is added to more skim milk. Enriched in this way with fat the fluid can be made to yield a fair sample of cheese. An oleomargarine cheese (for which I would suggest the name cheesette) although it would have considerable nutritive value could not possibly have the flavor of the genuine article.

R. B. Hall, in the Cincinnati *Lancet and Clinic* (March 14) describes a laparotomy done by Dr. A. Martin of Berlin in his private Hospital. I speak of it because Martin is one of the few who now make any extensive use of the carbolic acid spray during abdominal sections. The account is too long to give here, but evidently Dr. Martin does not believe that if the object of the spray is to kill micro-organisms that are likely to infect the wound that that purpose may be accomplished by merely allowing a steamer to eject carbolized steam for an hour or so before and during an operation.

During the time of the operation and for half an hour before it is commenced the spray apparatus is kept going, so that the air in the room (a small one) is saturated with carbolized moisture. So thoroughly is this done that the water runs down the walls, and the clothing of operator and spectators feels and looks as if they had taken a bath. Dr. Martin and his assistant wear linen clothing during the operation, which is washed before it is again worn. The cloud of carbolized steam is so thick that one can see with difficulty, and it soon becomes so irritating as to cause coughing.

The preliminary precautions to be observed by the person who is invited to attend operations in his private hospital are as follows: 1. For 24 hours before coming to the hospital he must not go where there is infection. 2. He must wear freshly washed linen and clothing that has not been worn in the sick room or hospital. 3. In the operating room he must not touch instruments,

sponges or anything used at the operation. At the hour named the door of the room is locked, and nobody is expected to leave until the wound made has been dressed. Visitors are requested to remove their coats, vest and cravat, and are admitted to the room only when the patient is on the table and all arrangements are completed.

Dr. Martin has remarkable success, as the result of the strict carrying out of this plan ; but one feels like asking whether, if there were no antiseptic in the steam, or indeed if the spray were omitted altogether, similar favorable results might not ensue. I see that Emmet is opposed to the use of the carbolic spray in any shape (page 715 "Principles and Practice of Gynecology") and the proof is plain of its having poisoned patients.

The latest advices from German laboratories report no new bacilli this week. There has also been no re-christening of the cholera germ. It is now in order for some one to show that Koch, and all the members of both commissions (French and English) are in entire harmony !

I understand that there is considerable dissatisfaction in medico-military circles with the appointment of Dr. Roddick as assistant Director general of the surgical service in the North-West. No objection can be raised to Dr. Roddick in the score of ability or experience, but it is claimed that he was actually appointed over the heads of all the old surgeons in the militia who have served for varying terms, while but very recently connected with the "Prince of Wales Rifles" himself. Of the propriety of Dr. Bergin's appointment there can be no question. He has been lieutenant-colonel of the 59th Battalion since 1869, and is a man of energy and ability.

P. A. Laver, M.D.

Montreal, April 19, 1885.

PERSONAL.

Dr. Graveley, of Cornwall (C.M., M.D., Bishop's College, 1877), has been appointed 2nd Surgeon to the Ambulance Corps on duty in the North-West, under the direction of Dr. Douglas, V.C. Dr. Bell, Surgeon of the 6th Fusiliers, Montreal, is 1st Surgeon of the above Ambulance Corps. Dr. England (C.M., M.D., Bishop's College 1885), left for England on the 18th by the Allan steamship "Circassian." Dr. England intends passing some time at the London Hospital.

Dr. Roddick, of Montreal, has been appointed principal medical officer to the forces in the North-West. Dr. Roddick was appointed Surgeon to the 1st Battalion (Prince of Wales Rifles) on the 21st March, 1885.

Dr. J. G. B. Howard, son of Dr. R. P. Howard, of Montreal, has returned from a lengthened sojourn in Europe, and has commenced practice in this city.

Dr. MacDonald (C.M., M.D., Bishop's College) of Manchester, N.H., U. S., has received from the Pope a decoration. Dr. MacDonald, who belongs to Nicolet, served in the Papal Zouaves.

Dr. W. P. Shoemaker, of Elk City, Penn., U. S., whose letters on the New York Hospitals and Medical Schools have appeared in the last two numbers of the *Record*, is now in London, England. He has been given the position of Clinical Assistant to Sir Andrew Clark of the London Hospital. Some interesting communications from him will shortly appear in our columns.

Dr. Heartwell, of Dunnville, Ont., died suddenly on the 10th of February, at the early age of 36 years. Dr. W. H. Montague has returned to Dunnville, Ont.

Dr. O. S. Strange, of Kingston, Ont., has received the surgeoncy of the penitentiary, in place of Dr. Lavell, who has been appointed warden of the same institution.

Surgeon-Major Neilson of B Battery Canadian Artillery, who went to Egypt in medical charge of the Canadian Voyageurs, did not return with them. He remains in the Soudan, and we believe was with General Stewart's column in its terrible march across the desert.

Dr. J. W. Mount has again been elected a member of the Montreal City Council.

Dr. Turcotte of the 9th Bat. Quebec has been gazetted "Surgeon-Major" as a special case. His commission is August, 1870.

Dr. Giason of L'Islet is a warrior doctor. He nas just gone through the military school at St. John, P. Q., as a lieut. of one of the Battalions in his neighborhood.

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Original Communications.

ANTISEPTIC MIDWIFERY.

By Geo. E. Armstrong, M.D.

Professor Physiology University of Bishop's College, &c.

(Read before the Medico-Chirurgical Society of Montreal.)

That Sir Joseph Lister has done a great deal for surgery—by enlarging the field of justifiable operations and by rendering the results of all operations more satisfactory—probably none will deny. But to what extent the details of his method of operating are essential there is still a wide difference of opinion; and even the soundness of the theory upon which his practice is based may be safely questioned. Indeed there is a suspicion among not a few that, after all, we may find in the future the lesson to be learned from the practice of Lister is that absolute cleanliness of the part operated, upon the part of the operator, and of instruments used in the operation, is *the great essential* of success, and the thanks of the profession to Joseph Lister should be none the less profound because his labors have been none the less effective if the suspicion should prove to be correct. The germ theory is the fashionable way of accounting for many of the accidents of surgery, as well as for the presence among us of many diseases. Lest we again lay ourselves open to the charge, sometimes laid against us by the lay press, of allowing ourselves to be led to one extreme by some prominent professor with an unpronounceable name, and then in a short time following some other leader as blindly to the other extreme, let us pause and examine some of the facts of familiar occurrence in every-day life, and ascertain whether or not they are in harmony with the theory advanced.

Antiseptic surgery is based on the theory that the atmosphere which we breathe and by which we are surrounded contains germs which when allowed to come in contact with wounds, are capable of lighting up unhealthy action in them, and this theory has been more and more widely applied, until now, by some, it is taught that the physiological act of child-birth should always be conducted on what are known as strictly antiseptic principles, and it is this somewhat new application of the germ theory that I purpose briefly to discuss this evening.

Do our parturient patients whom we attend in confinement in the ordinary way without the use of any antiseptic dressings or douches, and without any special previous cleansing or disinfection of their apartments, present as a rule symptoms of septic inoculation? So far as my experience goes the answer is decidedly in the negative. If I am not much mistaken, it is the exception for men who do a large midwifery practice among the middle and lower classes to have cases of septic poisoning occurring among their parturient women. We younger men are often called to attend women in their confinement whom we see for the first time when they are in labor,—women who live in unhealthy, low, badly-drained localities, and in houses not over-clean and illy-ventilated. Women whose surroundings are eminently adapted to favor the growth and spread of atmospheric germs, and yet even among these I believe it is comparatively rare to have trouble of a septic character.

Now if a man confines 100 women, and 98 of them make perfect recoveries and two of them present symptoms of septic poisoning, should he blame any one of the many surroundings common to them all as air, or should he look for some extraordinary agent, to account for the evil. The experience of ages and all medical literature teaches the latter. We constantly hear and read of septic cases due to a portion of decomposing placenta or membrane or blood-clot remaining in the uterus or vagina, or cases that can easily be traced to contagion carried by the accoucher.

Now, is it possible for the strictest antiseptic precautions to prevent the occurrence of septic infection of women during and after their confinement?

Let us suppose, for instance, that we have had apartments to be occupied by our patient newly whitewashed and papered and disinfected, and the bed and bedding and napkins and all the clothes to be used by the patient thoroughly carbolized or sublimated, is our patient then safe? I fear not, unless the accoucheur and nurse themselves see to it that they neither touch nor enter the presence of any unclean thing. If the doctor comes from examining a child with diphtheria, or a patient with erysipelas, and enters that chamber, and touches the patient or he napkins, he unavoidably communicates the poisons to the patient or to the napkins and the napkins to the patient. I think I cannot better illustrate not only the *possibility*, but the *probability* of such a sequence of events than by quoting an account of similar occurrences from the latest edition of Emmet's Principles and Practice of Gynæcology. On pages 717 and 718 of this work Emmet relates the two following cases. In the first one Dr. Emmet was about to remove a small ovarian cyst from a young girl in apparently perfect health. Dr. Emmet says: "The sponges, instruments and ligatures had been prepared with unusual care, and I never performed an operation where there seemed so little liability for any complication to occur." Just before the operation several physicians from the Polyclinic or Post-Graduate Medical School sent in cards of introduction from some of the staff, requesting that they might witness the operation, and they were admitted. Just as the Doctor was commencing the operation one of these gentlemen picked up a pair of forceps or scissors from the tray to show a friend alongside. Emmet caught his hand, requested that he would not touch the instruments, and then went on with the operation, neglecting to disinfect the hand that had touched the gentleman's coat. In less than 24 hours, the report says, the girl was doomed, and died on the sixth or seventh day. It was found at the autopsy that an abscess had formed, extending from the wound and around the pedicle, and that the girl died of septic peritonitis. Emmet adds that the man who picked up the instrument was responsible for the girl's death.

The other case is that of a woman suffering from procidentia sent to Dr. Emmet for treatment by Dr A. Jacobs. At the operation, after Dr. Emmet had denuded a large surface, Dr. Jacobs, who was present, placed his finger upon the prolapsed surface to satisfy himself that it was unusually hard. Two days after the operation, the patient's temperature was found to be 105°. Upon removal of the sutures the whole surface which had been freshened was found covered with a diphtheritic deposit as thick as a piece of chamois leather. It was ascertained that Dr. Jacobs had examined the throat of a child suffering from diphtheria early that morning. The operator had not seen a case for years; Dr. Bache Emmet, the assistant, had not in six months. The nurses were out of the way of meeting the disease, and the patient had not been out of the house for several weeks.

Now the two points I would make here are:—

1. How remarkably easy septic matter is conveyed. From what we know of the properties of septic matter it does seem that if the air is full of them all wounds exposed to the atmosphere pressing these germs against exposed surfaces, with a pressure of 15 lbs to the square inch, should become infected; yet we know from experience that this is not the case, and the fact that this is not the case is good evidence that the atmosphere ordinarily does not contain them. That wounds heal kindly and by first intention, and that women are confined every day without any septic trouble supervening, and without the so-called antiseptic precautions being taken, certainly proves this much—that the so-called antiseptic precautions are not essential to perfect healing of the parts after an operation or to perfect recoveries after confinement.

And, 2, that, in spite of all possible antiseptic precautions, one touch from a known and well-de-

fined source of contagion, makes all our antiseptic preparations useless.

May not the question be fairly asked: if all the known and well-defined sources of contagion are strictly guarded against would we need all this paraphernalia to protect our patients against an imaginary foe?

When going through a hospital and seeing wounds filled with pus that have been made under the spray and dressed according to Lister's method, it is really amusing to listen to the many explanations given to account for the presence of the pus and the unhealthy action. Some little detail, we are gravely told, was accidentally omitted, and this is the result. Explanations which can only be compared to the reasons given by those estimable people possessed of more goodness of heart than of wisdom when trying to account for the non-restoration to health of some one who had something the matter with him and had been prayed over by the brethren possibly for months together.

Herbert Spenser in his essay on the coming slavery says, that when railways were first opened in Spain peasants standing on the track were not unfrequently run over, and that the blame fell on the engine drivers for not stopping,—rural experiences having yielded no conception of the momentum of a large mass moving at a high velocity, and he goes on to speak of a political momentum which, instead of diminishing or remaining constant, increases. I think we might recognize a momentum in antiseptic theories—a momentum that seems to be carrying us into irrational and absurd practices, that after a time we shall be compelled to give up, but not without the loss of prestige and influence with the public. According to the present rate of progression we shall soon, when called upon to attend a case of midwifery be compelled to retire to our bath-rooms, wash and scrub in disinfectant solutions, don a fresh suit of disinfected clothes, and, like the Romish priests, when called to administer the communion at a person's residence, we shall go forth, preceded by couriers to clear the way and open doors, etc., etc., not daring to touch even a door bell knob, lest, possibly, an unclean mendicant has first handled and defiled it.

Would it not be better if our line of action were directed against more tangible sources of septic poison than the atmosphere we breathe. Instead of becoming machines, let us more carefully and intelligently avoid known sources of danger.

We, as general physicians, must attend diphtheria and scarlatina and peritonitis, etc., but it we do, before going from these cases to attend confinements, let us take those measures to ensure against conveying them to our patients which every day experience proves to be sufficient, rather than inflict upon our patients a long detail of preventive treatment, which is repugnant, troublesome and costly, both as to time and money.

More than this, these very precautions which some would induce us to take to insure the safety of our patients may be made indirectly to increase this danger by rendering us less careful in avoiding known sources of contagion. When in Philadelphia a year ago, in conversation with Prof. Leverre, he expressed himself as a thorough believer in Listerism. He told me that when going through Sir Joseph Lister's wards Lister remarked to him that his wards were æsthetically dirty but surgically clean.

That simply proved that it was possible by great care and by the use of every precaution to keep a surgical wound clean in an æsthetically dirty ward; but it shows the tendency to trust to these more showy and formal means of prevention, and to neglect the ordinary rules of cleanliness, which have been rightly said to rank next to godliness.

Let us first pluck the beam from under our finger nails, and then, perhaps, we shall see more clearly to pluck out the mote from the atmosphere.

VALEDICTORY ADDRESS.

Delivered on behalf of the Graduating Class of the Medical Faculty of Bishop's College, March 31st, 1885.

By the Rev. J. B. SAUNDERS, C.M., M.D.

We have reached to-day one of the goals in life's great race. The hopes of years to-day are consummated. The boding fears of many months now are dispelled for ever, and, armed with our letters patent, we gladly array ourselves for the stern battle of professional life.

We have sat in meekness at the feet of these "most grave and reverend Seignors"—the amazement growing every day how those "small heads could carry all they know," and the still greater amazement, how we could store their instructions

all away and carry them up to our examinations ticketed and labelled ready to be fired forth at the given moment when the test questions should be launched upon us. But toil and patience, and perhaps some small modicum of "cheek" have pulled us through, and to-day we leave our Alma Mater and take upon ourselves the burdens and responsibilities of a Medical career.

Some time ago we felt it would be *such* a relief to escape from the professional eyes of those who overawed us with their learning and overwhelmed us with a most discouraging sense of our own deplorable ignorance. But now the hour has come at last: we find, mingled with an unmistakeable sigh of relief, an unmistakeable sigh of regret also. Your ardent love of the profession, your untiring researches after the hidden truths of science, your unceasing efforts to lead us to lay broad and deep the foundations of a true liberal medical education, your words of warning and counsel and encouragement have inspired us, not only with a deep interest in the studies of our profession, but also a deep love for the men to whom we owe so much.

I am sure I am but voicing the united sentiment of the students of Bishop's College when I say that we hope for and expect a great future for the Medical College of Bishop's University.

We believe she has a mission to perform in Medical Education in this land; we believe she is struggling nobly to accomplish that mission; and though other, older, institutions may now excel her in the number of her graduates, we can hardly think that one can be more loyal to the great facts of medical science or more liberal in embracing the latest revelations and sifting well the basis upon which the hypotheses stand. And we are quite sure that no similar institution has professors more deeply interested in the welfare of those who enroll themselves as students under their escutcheons. Let the professors toil together, lifted by their love of truth and their love of Alma Mater above all personal bitterness and sordid motives. Let the alumni stand firmly together, toiling for these great ends and helping each other by cheery words over the rugged steps of professional life, and the time will come, and will not tarry, when Bishop's College will number her graduates by the hundred, and her influence in this vast Dominion will rival that even of older and richer schools.

And now we have to say farewell to our professors. We have learned from you that the voracious Tinea Solium, the dreaded Tinea Medio Cancellata, the nimble Bothio Cephalus Latus, the destructive Trichinæ Spiralis slumber unobserved in the luscious beef-steak and the toothsome pork chop; that Vacina float slily in the milk that is daily brought to our doors, and deadly Bacteria fill the air we breathe, and swarm in the water we drink; the cunning Bacillus, the insidious Microbe finds its way into every avenue of these mysterious organisms in which we live and move and have our present habitat, so now, being too wise ourselves to eat meat or drink water or breathe air, we go forth to help those whose carnal appetites still dominate their being and hold them in bondage to the merciless Bacteria. With Lister's atomizer in one hand, and Perrigo's irrigator and Campbell's insufflator in the other, we leave these classic halls to-day, swearing war to the knife against every infective germ and deadly contagium which macroscopy or microscopy has ever revealed.

We know now that if these wild and formidable creatures are caught young and evolved or rather involved some twenty generations backward, and reduced down by simple unstimulating diet they lose much of their native ferocity, and can almost be domesticated, so that 1-10,000,000 part of a grain of micrococci can impart a form of the disease so slight as not to keep a man away from his office more than one afternoon, indeed it may be so arranged that the sepsis can be imparted Saturday afternoon and leave the man ready for his Monday morning, without having lost one hour out of his business life, and yet fortified for ever against that disease for which he has received inoculation.

If we can only catch the foe whose delight it is to produce each particular form of deadly disease, and diet him down until he grows peaceful and harmless, and dole him out in minute doses, we can ensure our patients immortality, and prove to men everywhere that life, after all, may be made worth the living.

I may also say a word to my fellow graduates:—

Grand indeed is the field that stretches out before us. Bright are the hopes which beckon us on. Rich are the rewards which invite us. It will be ours to labor in three great departments of toil: The prevention of disease, the alleviation of human suffering, and the saving and prolonging of human life. In the first of these much, very much, still remains to be done. The known laws

of Hygiene are sadly neglected almost everywhere Even this famed city has few, appallingly few, houses, even of the wealthy and intelligent, the hygienic arrangements of which are anything like perfect.

The public generally, and our aldermen in particular, need to be aroused at this time to the great principles of Sanitation.

It will be ours, too, to relieve the suffering of our fellows. What task can be more inspiring and draw more largely upon our better natures than that. If we are true to ourselves and our profession many a suffering one will bless our coming and many an anxious heart will find relief in our words of cheer. But, above all things, let us learn to be loyal to truth. Oliver Wendell Holmes says a physician's first duty is to his patient—himself second always. Strong temptations lie before us. The temptations of empiricism and quackery. A "Rule of Thumb" practice is the easiest thing in the world to fall into, and is most disastrous to the profession and dishonest to the patient. He has a right to our best thoughts, our most painstaking care and research even though he be too poor to remunerate us with anything but thanks, and too careless even to do that.

If we undertake his case we are bound by every law, human and divine, to devote our whole energies to his welfare, every phase of the disease and every sympton of the malady should be carefully guarded, and untiring efforts should be put forth for his recovery. We shall be tempted to deceive. Who is not ? every profession lies open to the temptation. The most earnest minister may plead guilty to keeping back part of the truth, not because he fears a trial for heterodoxoy perhaps but because he firmly believes the whole truth is hardly best for his congregation in its present condition, and the greatest good to the greatest number is accomplished by but a partial unfolding of the truth—strong meat being reserved for the more mature. Perhaps he is wise, but is he honest?

The lawyer faces men sworn to tell the truth the whole truth, and nothing but the truth, and yet he uses all his powers to extort from him only that portion of the truth which is most advantageous to his client. Perhaps he is wise, but is he honest ?

The Physician, too, will be tempted. He must give a prescription with three ingredients and a vehicle. It would not be orthodox else, even though he knows full well that what his patient needs is fresh air and clean water and soap. Perhaps he is wise, but is he honest ?

He must give a diagnosis, though the case is undeveloped and involved. Pathonominic symptoms have not yet revealed themselves, nevertheless anxious eyes are upon him, appealing accents ring his ear. He must look learned and confident and serene. Perhaps he is wise, but is he honest ?

He must give a prognosis, even though he knows a true prognosis will hasten the last act of life's great tragedy, throw gloom over a happy home, and strike dismay into loving hearts, he hesitates, falters, prevaricates, fabricates false hopes, and invents a prognosis to suit the occasion. Perhaps he is wise, but is he honest ?

Well, let us resolve, whatever comes, we will be honest, and if we cannot be honest at least let us resolve to be as honest as we can. And now, right here our paths diverge. But we shall travel in cycles, and, however divergent they may be, be sure they will converge at last to the feet of the Infinite.

Let us act, then, so that in that moment our retrospect will bring us at least these thoughts: that we have done our part to chase away vice and crime, to dispel ignorance, to lift opinion to a loftier seat, to blot the era of oppression and superstition out and lead an universal freedom in.

Progress of Science.

TREATMENT OF DISEASES OF THE STOMACH.

BY DR. M'CALL ANDERSON.

In the first rank must be placed diet and regimen, as many disorders can be cured by attention to them alone, while few can be treated successfully without them.

As an instance of a disease in which they are indispensable, let us take the case of ulceration of the stomach. In this affection absolute rest in bed is generally indicated, although I am by no means prepared to deny that many can and do recover without it. Here the diet must be of the simplest kind, given in small quantities, and at short intervals; and a good rule for our guidance is, that *anything which causes pain or sickness*, and this remark applies almost universally to all affections

in which these symptoms are present—is injurious. Milk, in combination with lime, Vichy, or seltzer water, and well iced, is usually the best ; or if this does not agree, butter milk or koumiss, or peptonized farinaceous food (such as that prepared by Savory & Moore) or what is known in commerce as "Solution of Meat" may be tried ; the quantity administered at a time being reduced to the point it which it occasions no discomfort Even a teasponful may be all that can be borne at once and it is much better to give a very small quantity which is retained than a larger amount which disagrees. In extreme cases the best practice by far is for a time to suspend the administration of food by the mouth altogether, and to feed the patient *per rectum*, allowing him, however, to slake his thirst by sucking a small piece of ice occasionally. The enemata which I have latterly been in the habit of using are Savory & Moore's "nutritive enema "and "Carnrick's beef peptonoids." Leube's meat pancreatic clysters—a solution of meat treated with pancreatine—are also worthy of trial. But it must never be forgotten that feeding *per rectum* is only a temporary expedient, with the view of giving perfect rest to the affected organ. because the co-operation of all parts of the digestive tract is required ; Voit and Bauer having shown that the rectum is only capable of absorbing about a quarter of the albumen necessary for the maintenance of life with the addition of fat of hydrocarbons. And yet, in the case of an eminent citizen well known by reputation at least to all of you whom I saw several times in consultation, life was maintained for a whole month by the use of nutritive enemata alone, not even a drop of water having passed his lips during the whole of that time.

Dr. Debove does not approve of milk diet, owing to its tendency to dilate the stomach. He prescribes three meals daily, each composed of 25 grammes of meat powder mixed with 1 of burned magnesia, 2 of prepared chalk, and 1 of sacharrated lime ; and a quarter of an hour after each meal he administers 4 grammes of bicarbonate of soda. The gastric juice is thus neutralised and no peptone are formed in the stomach. On the other hand many are in favor of a method of treatment, whose principal exponent is Prof. Ziemssen, and which consists in the administration every morning of an alkaline aperient whose basis is Glauber's salt. For this purpose he gives Carlsbad water, or the natural, or—best of all, because most aperient—the artificial Carlsbad salts dissolved in water. "I make my patients," he says, "take every morning, fasting a solution of from 8 to 16 grammes, or 2 to 4 drachms (one or two teaspoonfuls heaped up) of the salt to a pound (one pint) of water which has been poured on when boiling, and then the whole cooled down to about 44° R. A quarter of a pint is taken every ten minutes. Two or three motions are necessary ; if the bowels are moved only once, or not at all, an enema should be used, and on the following morning the quantity of the salt should be increased by ½ or doubled, the quantity of water remaining the same. Subsequently as a general rule less concentrated solutions are sufficient and then the patient may return to a teaspoonful of the salt to a pint of water. In cases where the gastric catarrh is very intense, and the pyrosis particularly obstinate it will be found advantageous to administer every evening duriug the first week, another bottle of an acidulous soda water (Giesshübel, Bilin, or Vichy). "The carbonate of soda, the chloride of sodium, and the Glauber's salts neutralise the acids and check the fermentation. They therefore suppress the corrosive action upon the floor of the ulcer, and the reflex contraction of the pyloric muscular fibres, and by their strongly excitant action upon the peristaltic movements of the stomach they cause the fermenting liquids to be rapidly discharged into the bowel. It is evident that if the stomach is thoroughly emptied, at least once a day, its contents are much sooner rendered temporarily alkaline, or neutral, and their tendency to fermentation restricted."

In many cases of ulceration sedatives, such as small doses of morphia with bismuth and hydrocyanic acid, are valuable, but constipation is apt to be induced or aggravated by such medication, and then they may be combined with the use of the alkaline aperient above mentioned or resort may be had to the black oxide of maganese–a gastric sedative not so well known, which was introduced by the late Dr. Leared—and which, in doses of 10 grains, has proved most useful in my hands for this and similar condtions. In chronic cases small doses of arsenic —from one to two minims of Fowler's solution three or four times a day often yield the best results.

In acute catarrh of the stomach, even greater care is required as to food than in the case of ulceration. Indeed, on the principle of keeping an inflamed organ at rest, it is often the wisest course to abstain altogether for two or three days from the administration of food by the mouth, although ice may usually be sucked with comfort and advantage. Hot applications to the epigastric region often afford some relief, while calomel is one of our sheet-anchors, especially for those in whom it acts as a gastric sedative, and checks vomiting; it may be given in a dose of 5 grains, which may be repeated in a day or two, if need be, or in smaller doses at shorter intervals. In addition to this other gastric sedatives, such as those already mentioned, may be used, but none are so likely to prove beneficial as the subcutaneous injection of morphia. If there is great exhaustion, a little well-iced champagne may be tried from time to time, and as the symptoms subside, the utmost caution must be observed in improving the dietary.

It is often difficult to say whether we have to deal with dyspepsia or with chronic catarrh of the stomach (inflammatory dyspepsia as it is sometimes called). We may, however, suspect the existance of the latter if there is slight fever at night with some loss of flesh, if the tongue is coated and

red at the tip and edges, or red smooth and glazed, or raw looking; if thirst is present, if the uneasiness after food ever amounts to pain, if there is tenderness in the epigastric region, if there is nausea or vomiting, if mucus is vomited in the mornings, and if the urine is high colored and deposits lithates. Having satisfied ourselves that we have to deal with chronic catarrh, our first aim in treatment is to remove the causes—such as irregularities of diet and regimen, constipation, the excessive use of stimulants, gout, disease of the kidneys, obstructive disease of the liver, lungs, or heart—which we must attack on the same principles as we would do if they occurred independently of stomach catarrh. This having been done, and the symptoms persisting, we may resort to the use of occasional doses of calomel and of saline purgatives—such as Friedrichshalle, Hunyadi Janos, Püllna, &c., or a visit to one of the more celebrated spas—such as Homburg, Kissingen, Carlsbad, or Wiesbaden, may be recommended. When there is evidence of fermentation in the stomach—flatulence, acid eructations, &c.—permanganate of potash is specially to be recommended and often speedily gives relief.

In the later stages the saline treatment may be combined with tonics—the sulphate of magnesia mixture in combination with sulphuric acid, strychnia, and columba for example. The diet must all along be most carefully regulated, consisting of milk, beef-tea, and farinaceous food, while, in the slighter cases, fish, poultry, and game may also be allowed. The meals should be small, and not too numerous; and, as a rule, all stimulants should be strictly forbidden. During convalescence, tonics may be cautiously administered—being selected in accordance with the surroundings of each case.

Arsenical treatment has already been alluded to as being sometimes useful in cases of ulceration, but there is another class of affections in which it, as well other anti-neuralgic remedies, is sometimes of the utmost value—viz., "neuroses of the stomach." These usually give evidence of their presence by the occurrence of pain of a neuralgic character, or of vomiting. Such cases are very apt to be mistaken for ulceration on the one hand, and dyspepsia on the other; and we may frequently aid our diagnosis, as well as contribute to their successful treatment, by means of diet, for the symptoms are sometimes relieved by giving nourishing food—even solid, hot and stimulating, food—and by administering stimulants, while those of the above-mentioned disorders are pretty sure to be aggravated thereby.

In other cases the stomach pain is but a symptom of chlorosis, and its true nature may be suspected if there is an absence of other symptoms of stomach disorder on the one hand, and the presence of waxy pallor of the surface and other symptoms of chlorosis on the other; but care must be taken to exclude ulceration, which is by no means an uncommon complication in chlorotic subjects. In this class of cases iron in full doses constitutes our sheet-anchor, and nothing in my experience answers better than a prolonged course of Bland's pills.

Nor must we forget that these neurotic symptoms frequently result from irritation of the spine, so much so, that I make it a rule in all cases of doubt to examine the spinal region, even when the patient makes no complaint of backache, to ascertain whether there is any spot which is tender on pressure; and I have been surprised to find how often there is tenderness in the dorsal region which had never before been suspected. Such tenderness is all the more likely to be present if the gastric are accompanied by other symptoms, such as hard barking cough, or localised pain beneath the left breast. When the mischief lies in the spine it is needless to attack the stomach; but leeches, and counter-irritation by means of fly-blisters over the tender parts, along with rest, tonics, and careful attention to the general health, constitute our sovereign remedies. As an illustration of this, let me recall the case of a weakly young woman who was under my care in June, 1879, and who came complaining of persistent vomiting of several months' duration. The vomiting was easy and painless, and there was no preceding nausea nor any sensation of pain while the food lay in the stomach; it was accompanied by hard, dry cough. The vomited matters consisted of undigested food, mixed with green streaks and patches, and blood was never observed to be present. The regurgitation of the food went on getting worse, occurring after every kind of food and at gradually decreasing intervals after meals, sometimes even taking place during the act of eating. All kinds of stomach remedies, including the application of a fly-blister to the epigastrium, had been tried ineffectually, and when I saw her she was not only in a state of the greatest debility but more emaciated than almost any patient I have ever seen. On examination of the spine, distinct tenderness was discovered for a distance of about 2 or 3 inches at the junction of the middle and lower dorsal regions. A fly-blister was applied over the tender part, and after it rose the vomiting entirely ceased, except on one occasion, after taking some purgative medicine. From that day onwards she never looked behind her, and made a rapid and excellent recovery.

Again, as is well known, irritability of the stomach, in a very tractable form, may set in during the first half of pregnancy. It may sometimes be removed by careful attention to diet and regimen, and by the administration of gastric sedatives, such as those already mentioned, or by the use of the oxalate of cerium, a favorite remedy with the late Sir Jas. Simpson. But, as has been clearly stated by Dr. Grailly Hewitt, it is in many cases the result of interference with the normal expansion and growth of the gravid uterus—there being two factors, both of which may be conjoined in a given case, capable of producing this—viz., (1) incarcera-

tion with flexion or version; and(1)hardness and rigidity of the os and cervix, the first being much the more important of the two. The second factor is likely to be removed, and with it the vomiting, by Dr. Copeman's plan of dilating the internal os; while the first is obviated by raising the uterus from its displaced position, and if this can be done, the vomiting almost invariably ceases.

In the last resort we must relieve the condition by the induction of premature labor, which should be done before the strength of the patient is reduced to too low an ebb.

Of the treatment of that hydra-headed monster, dyspepsia, time will only permit of my giving one or two illustrations. Let us take the case of a full-blooded man of sedentary habits, who indulges in the pleasures of the table, and whose bowels are habitually costive. He has bad teeth or eats his food very quickly; he dines in town, making for the nearest restaurant and snatching a hasty meal of very miscellaneous and often badly cooked food. He has frequently headaches, or a feeling of "swimming in the head," which may be the immediate cause of his seeking advice. We find that his tongue is habitually coated, that his appetite is defective, that he has a craving for food, and after a meal he has "a load at his stomach," or complains of a feeling of distension, from which he finds relief by loosening his clothing. At times, too, he may suffer from uneasiness in the hepatic region or in the shoulder, and his liver may even be slightly tender on pressure.

I have taken as an illustration a typical case such as we often meet with in business circles, and which cannot readily be mistaken, but minor forms of the same condition are very apt to be overlooked, especially if our advice is sought for some ailment indirectly produced or aggravated by the dyspepsia, such as asthma or eczema, or gravel.

In such cases the bowels must be carefully regulated, and occasional doses of antibilious medicine —than which nothing is better than calomel—are indicated, or a course of Friedrichshalle or Hunyadi Janos, or of the mineral waters of Harrogate, Homburg, or Marienbad.

This treatment is, however, only of temporary service, unless at the same time, we remove the causes by making complete change in the diet and regimen.

Our patient must be instructed to take plenty of exercise in the open air, to pay a visit to his dentist if need be, to have his meals with regularity, to eat slowly, and in great moderation, to chew his food thoroughly, even soft food being well mixed with the saliva before it is swallowed—in a word, he must be instructed to do as much as possible in the way of division and digestion of his food in the mouth, so as to throw less work upon the lower portion of the digestive apparatus.

He should dine off two or three dishes, and should, for the most part, avoid many articles of diet in every day use, such as tea, coffee, spices, and stimulants, oatmeal, cheese, pastry, soups, containing vegetables (such as hotch-potch), potatoes, raw vegetables (such as salads), and unripe fruits, fresh bread-stuffs of every kind taking toast, pulled bread, rusks, or plain biscuits instead—sweet things, unless of the simplest (such as rice pudding or stewed apples). Butchers' meat should be partaken of in small quantity, veal and pork being eschewed—raw meat is much harder of digestion than cooked, boiled than roast, old than young, and fat than lean.

A very different form of dyspepsia is one which, from a clinical point of view, may be described as weak digestion (one variety of which is the so-called atonic dyspepsia), and which is apt to be acquired by long-continued abuse of the organ of digestion, although it may occur independently of such causes, being, so to speak, natural to the individual.

The more such persons are in the open air the better, although care must be taken, in the case of those who are weakly, that exercise is short of fatigue, and intervals of complete relaxation from work and worry, with change of air and scene, are frequently beneficial, while a course of mineral waters at one or other of the more noted spas—such as Homburg, Carlsbad, or Spa—which must be selected in accordance with the surroundings of each case, may prove of much service.

The diet must be regulated with the greatest care, the food being nourishing, but light and easy of digestion. The meals should be frequent but small, fluids being taken only at the end of each, and in many cases, with the principal ones, a dessertspoonful of whiskey in potash water may be prescribed with advantage.

Tonics are frequently beneficial—especially vegetable bitters, strychnia, and arsenic—in combination with acids or alkalies, but they must be skilfully selected, for their action in different persons is very capricious and uncertain. It is in this class of cases *par excellence* that artificial aids to digestion are indicated, which consist chiefly in the use of pepsine in some shape or other, or of acids. A fresh extract of the former may be readily made according to v. Wittich's method, with glycerine as follows. The mucous membrane of a fresh pig's stomach is minced, thoroughly washed, and treated with strong alcohol, which does not affect the pepsine, but lixiviates the salts and precipitates a portion of albumen—500 ccm. of glycerine are then added; in 24 hours the extract is filtered and ready for use, the dose being ℥ i or more. For those who are practising in country districts, or where expense is an object, this preparation is specially worthy of trial. For my own part I am in the habit of prescribing Benger's liquor pepticus; but there are other preparations, such as Liebreich's pepsin-essenz, which may perhaps be preferred by some.

In the majority of cases, however, it is the hydrochloric acid of the gastric juice, and not the pepsine, which is deficient, and which is

therefore much more frequently required, the dose being 8 to 10 minims of the diluted acid in a glass of water after each meal. The old-established practice of giving acid mixtures in cases of fever—during which the activity of the gastric juice is impaired—is partly due to this circumstance. It must never be forgotten that hydrochloric acid may be indicated, even when the gastric juice is very acid—as the result, for example, of acetic or butyric acid fermentation; for it takes a much greater degree of acidity to effect healthy digestion with them than with hydrochloric acid, the normal acid of the gastric juice. In order to ascertain whether it is the pepsine or the hydrochloric acid of the gastric juice which is defective, Prof. Leube adopts the following plan in some cases—"I let the patient take about 25 grammes of Carlsbad salt on an empty stomach, so as to cause anything which may remain in it to pass downwards; then about noon some plain cold roast veal, with or without bread. In from one to two hours afterwards I take out a portion of the contents of the stomach with the stomach sound, and convince myself concerning its smell and reaction, as well as how far the process of solution has advanced in the pieces of roast meat. I next put into three bottles equal quantities (about 50 cubic centimetres) of the filtered contents of the stomach, and hang in each of them a bundle of boiled fibrin of about equal volume. Into one of these bottles I put nothing further, into the second two drops of hydrochloric acid and into the third two drops of a neutral solution of pepsine. All three bottles are then placed in a large vessel of water, the temp. of which is kept at 95°-104° F. The digestion which takes place in the last two bottles will show whether one or other of the additions effects a more rapid solution of the fibrin than occurs in the first bottle, or whether they remain without import."

There are two or three other aids to digestion from which I have occasionally derived benefit—such as lactopeptine and ingluvin while Benger's liquor pancreaticus (which should be given in doses of ʒ i in a glass of water two or three hours after food—*i. e.*, when it is leaving the stomach), is specially indicated in cases of failure to absorb fats; but, on the whole, we are more likely to do good to our patients suffering from weak digestion by the administration of hydrochloric acid, or of liquor pepticus than of the above-mentioned preparations.

While there may be doubt as to the propriety of drawing off the contents of the stomach with the view of ascertaining whether the gastric juice is deficient in acid or in pepsine, there can be no question of the necessity of washing it out in cases of dilatation. For this purpose various solutions may be used—such as Vichy water, or lukewarm water containing 10 grains of pure carbolic acid, or 10 minims of creasote, or a drachm of hyposulphite of soda to the pint. But in addition to the daily use of the stomach tube, the diet must be carefully regulated so as to keep the organ as empty as possible consistent with fair nutrition of the system. The food should, therefore, be concentrated, given in small quantity and at short intervals; and it may be supplemented, if necessary, by the use of nutrient enemata. In order further to favor contraction of the distended viscus, an abdominal support may be worn, or faradisation resorted to (one of the sponges being applied over the epigastric region), and tonics, especially strychnia and nux vomica, are indicated.

It remains for me to refer to the question of operative interference in cases of obstruction at the pyloric orifice of the stomach, such as results from fibroid or cancerous disease, or from the cicatrization of ulcers—a subject which has been carefully considered by Dr. L. Rydygier in Volkmann's *Sammlung Klinischer Vortrage*, to whom I am largely indebted for the following facts: Merren was the first (in 1810)—and later Gussenbauer and v. Winiwarter—to prove that resection of the pylorus was quite a feasible operation in the case of the lower animals. But for all that it seems never to have been attempted in the human subject until 1879, when Péan of Paris, at the urgent request of a patient, cut out a carcinomatous pylorus. Death, however, ensued five days thereafter. On the third occasion upon which the attempt was made, on account of a similar condition, in 1881, the operator being Billroth, the patient made a good recovery, but died five months afterwards, owing to a relapse. Altogether, from April, 1879, till May, 1882, the operation seems to have been performed 23 times. Of these operations, only 5 were successful.

It must be admitted, therefore, that the results hitherto have not been brilliant; and yet, when we remember that the disease from which most of the patients suffered was certain otherwise to terminate fatally, it is some consolation to know that even a small proportion of them were restored to health by operative interference; and there is little reason to doubt that—just as in the case of ovariotomy—when the rules for carrying out the operation are more thoroughly understood, and further experience has been accumulated, the death-rate will be materially lowered. The operation is specially to be recommended when there is reason to believe that the obstruction is not of a malignant nature, or, if malignant, that the cancer of the pylorus has not seriously encroached upon the pancreas or other structures in the vicinity; and it is probable that earlier resort to the knife, and before exhaustion is extreme, may lead to greater success.

I cannot conclude without referring for a moment to the operation devised by Dr. Loreta, of Bologna, for cases of non-malignant contraction of the pyloric and cardiac orifices. This consists in opening the abdomen, and making an incision

into the stomach, through which the index finger of the right hand is introduced, and with which the orifice is forcibly dilated. The cardiac orifice cannot be reached with the finger, so that a metallic dilator is used instead. In a letter from Dr. Pedrazzoli, we are told that up to July 15, 1883, Dr. Loreta has in this way forcibly dilated the pylorus four times, and the cardiac orifice once. All of these operations were successful, although one patient is said to have died 36 hours after the operation "from causes entirely independent of the operation," and the evidence is in favor of the permanency of the cures. We may, therefore, look forward with confidence to the results of subsequent attempts in the same direction.

In cases of malignant obstruction at the cardiac orifice, we may sometimes prolong life by the formation of a fistula, or by introducing food with the aid of a narrow gum elastic tube.—*Glasgow Medical Journal, March.*

ON THE TREATMENT OF CATARRH OF THE RESPIRATORY PASSAGES—ACUTE NASAL CATARRH.

By I. Burney Yeo, M.D., F.R.C.P., Physician to King's College Hospital.

Now-a-days a "catarrh" means an abnormal increase in the secretion of any mucous membrane, due to hyperæmia, or inflammation of the same.

This inflammation may be *acute* or *chronic*, slight or severe, a mere passing irritation, or a more or less permanent malady. So that we now not only speak of *nasal*, *pharyngeal*, *laryngeal*, and *bronchial* catarrhs, but also of gastric, duodenal and intestinal catarrhs, catarrh of the bile ducts, but also of vaginal, urethral, vesical, and uterine catarrhs; meaning in all these cases an inflammation (or hyperæmia) of a mucous membrane, attended with an increase of or a modification in, its natural secretion. For the present we are only concerned with catarrhs of the respiratory mucous membrane, and first of all, we shall consider the occurrence and management of that very common and often distressing form of catarrh which is variously termed "coryza," "rhinitis," "nasal catarrh," or, more commonly, "cold in the head."

I need scarcely tell you that the lives of certain persons are troubled by a tendency to constantly "catch cold," as it is termed. I regret to say I am myself not free from this predisposition. But it is a curious fact that while some persons have a proneness to become afflicted with nasal catarrh, others will exhibit a tendency to pharyngeal catarrh, others to laryngeal, and others to bronchial catarrh. There are persons who are frequently the subects of nasal catarrh and even of laryngeal catarrh, but who never suffer from bronchial catarrh; and, conversely, there are many who although frequently the victims of bronchial catarrh, never suffer from nasal or laryngeal catarrh.

In my own personal experience, I find a nasal catarrh will, if neglected at its onset, occasionally extend into the larynx; but it stops there, and has never yet extended lower along the respiratory passages. To antagonise this predisposition to catarrhs of the air passages is an important consideration in their management. So also is the possibility of their spread by contagion. It is a popular belief that "colds in the head" are catching; and it is certainly remarkable the way in which they run through families and households.

Some account for this by assuming the existence of an "epidemic" influence associated with meteorological conditions, and no doubt these affections are at times epidemic, but they frequently occur and spread through families when their origin and extension cannot be so accounted for. Fraenkel remarks that he has often observed bridegrooms who have never before suffered from coryza, become attacked by this malady on marrying brides who have been prone to such attacks!

The chief cause of nasal as well as of other catarrhs of the air passages is no doubt the existence of an undue impressionability of certain portions of the surface of the body to even slight changes of temperature. Also the extreme excitability of the nasal mucous membrane in some persons to the contact of certain substances is a well-known cause of catarrh. The pollen of grasses and other plants produce in some persons distressing attacks, of so-called "summer catarrh" or "hay fever." The perfume of a rose has been known to have the same effect, and I have seen the most distressing attack brought on by turning over the leaves of a book that had long been undisturbed on the library shelves.

The treatment of acute nasal catarrh may be conveniently considered under three heads: 1. Prophylactic treatment. 2. General remedies. 3 Local remedies.

(1) *Prophylactic Treatment.*—The predisposition to suffer repeatedly from attacks from coryza, may be greatly diminished by suitable prophylactic measures. The most important of these is the adoption of some hardening process which shall have for its object the removal or diminution of a certain hyper-sensitiveness of the skin and mucous membrane which characterises such patients.

Avoidance of sedentary habits and free exercise in the open air are of great value. Cold affusion over the head and neck, begun in warm weather and steadily maintained throughout the whole year, is of undoubted efficacy. The use of the *shower-bath* for this purpose has been strongly advocated, but there are not many persons who can tolerate a cold shower-bath all the year round, but most persons can bear two or three large spongefulls of cold water wrung out over the head and neck on first rising in the morning. This process imparts contractile vigor and tone to the superficial vessels, and counteracts the tendency to vascular dilation, and hyperæmia, upon which catarrhal conditions mainly depend.

A tendency to nasal catarrh and to other catarrhal states is excited and maintained by residence in low-lying, damp, cold situations ; and it is hopeless to endeavor to relieve, permanently, such conditions while the subjects of them continue to dwell in these localities. It follows that one of the best prophylactic measures against attacks of nasal catarrh is residence in a dry, bracing locality. No measure is perhaps so efficacious as a preventative to such attacks as a few weeks' residence in a high, open mountain valley like that of the Upper Inn in Switzerland. I have myself experienced this in a remarkable degree. The dry, cold, bracing air of this region seems to be of especial value in lessening the morbid sensitiveness of the surface, so far as it tends to the production of catarrh of the respiratory tracts. I believe it acts partly by causing contraction of the superficial vessels and increasing their tone. It is quite otherwise with respect to the tendency to suffer from rheumatic pains when exposed to atmospheric vicissitudes. In such cases the climate of the Engadine generally aggravates the rheumatic tendency ; and this it probably does by checking cutaneous transpiration. (I have entered fully into this subject in some of the chapters in my work on " Health Resorts and their Uses.")

Next in value to mountain air, as a prophylactic, is well-directed sea bathing, during the summer months, associated with abundant exposure to the open air of the seaside. Such patients should not be allowed to remain long in the sea at one time ; it is better they should make repeated plunges, for it is the bracing shock to the surface that is required, not the continued contact of the cold seawater. At Biarritz they have a plan of standing just ankle-deep, or but little more, in the sea, and allowing the Atlantic surf as it comes in to dash over them—one of the best natural douches that can be imagined. Persons who suffer from summer catarrh or " hay fever," are often immediately relieved on removal to the sea coast. This treatment of combined sea-bathing and sea-air is of the greatest value to scrofulous children who frequently show a tendency to attacks of nasal catarrh, which sometimes become chronic, and give rise to much trouble ; for chronic nasal catarrh in scrofulous subjects is a most obstinate malady, and one difficult to treat with success.

(2). Next with regard to *General Remedies.*— Of all the general remedies advocated for the cure of attacks of coryza, opium or morphine is by far the best. I have again and again tested its value, and often in my own person ; and if it fails to cure or cut short a cold in the head it at any rate takes from it all its terrors ! Opium undoubtedly exercises a remarkable effect over the capillary circulation, especially in the respiratory mucous membrane, and I have often known a single dose of opium completely arrest a catarrhal fluxion from the nose, which, from its abundance, entirely prevented sleep, and this in fifteen or twenty minutes.

But it is by no means a matter of indifference what method you adopt in administering the opium. When you are able to treat the cold quite in its initial stage, when the nasal mucous membrane is only a little swollen and dry, and there is an uneasy feeling over the frontal sinuses, and before the occurrence of any great amount of fluxion, the following I believe to be the best method :—Supposing the patient to have had a good meal in the middle of the day, no more solid food should be taken that day, but about three or four hours before bedtime an eighth of a grain of acetate or sulphate of morphine (I use McKesson and Robbins' pilules of this strength) should be taken with a small cup of weak tea ; and at bed time another eighth of a grain with a wine-glassful of whiskey and water.

This measure alone will constantly arrest a cold in the head if adopted in the initial stage ; and even when this stage is passed it will relieve all the uncomfortable distressing feelings which attend these attacks. Yet you will often find it fail ; but it fails because both patients and doctors will not attend to small details. If you do not caution your patient to the contrary, he will probably eat a heavy evening meal, following the old-fashioned maxim of " feeding a cold," and take his dose of morphine on a full stomach. Now it makes all the difference in the world whether this small dose of morphine be absorbed into the blood in a few minutes, or whether it be mixed with a mass of food and absorbed slowly with it after some hours. The result in the two cases is wholly different. In the first case you have a definite quantity of your remedy immediately absorbed into the blood and circulating with it ; in the second, your remedy is slowly absorbed in indefinite quantity, and there is no reason that I know of why some of it should not pass out of the body in the residue of the food with which you have allowed it to be mixed !

When the initial stage is passed, and the nasal fluxion is thoroughly established with a distressing feeling of oppression and stuffiness about the nasal passages and frontal sinuses, I have found the following diaphoretic draught, containing opium, to be of the greatest use. I have taken it myself and given it to others for many years :—℞ Liquor. opii sedat. Mxv ; vini ipecac. Mv ; sp. ætheris nitrosi ʒj ; liq. ammoniæ acet. ʒij ; aquæ ad camphoræ ad ℥iss. To be taken at bedtime.

If the patient is able to keep to the house, and, better still, to one moderately warm room for a day or two, a single dose of this kind will not infrequently remove all the catarrhal symptoms permanently as well as immediately. But although it will surely give immediate relief, yet, if the patient exposes himself to changes of temperature the next morning the catarrhal condition will frequently return. Opium given in this form is not attended by the unpleasant effects generally found to follow its administration in the crude, solid form, such as headache, nausea, loss of appetite, &c.

Some feverishness and slight rise of temperature frequently accompany these attacks, and in these,

and indeed in all cases of the kind we are considering, we shall do wisely to give quinine in doses of one to two grains, three or four times a day. It is a valuable adjunct to the opium treatment. I am accustomed to give it in effervescence in the following form, which seems agreeable and refreshing to patients:—℞. Potassæ bicarb. gr. cxx.; ammoniæ carb. gr. xxxii.; syrupi aurantii ʒiv; aquæ ad ℥viii. M. ft. mist.—℞. Quiniæ sulph. gr. ix.; acid citrici gr. cxx. In pulvi. vi. One of the powders, dissolved in water, and mixed with a sixth part of the mixture, to be taken three or four times a day.

In children and young people, when an attack of coryza is attended with decided feverishness, and particularly if the throat is involved, and its mucous membrane is found red and swollen, great benefit will follow the administration of a few doses of aconite. Indeed, aconite is extremely valuable in all the ephemeral and symptomatic fevers of children and young people. I am in the habit of using Schieffelin's pilules of Duquesnil's aconitine $\frac{1}{100}$ gr. in each. I give one of these every two hours for three doses, and stop. Or you may give from one to three minims of the tincture (according to the age of the patient) every hour for three or four doses, and stop. My own experience of aconite teaches me that it is a drug which either produces an immediately beneficial effect, or is of no value. It is also a drug which is of much value in the initial stage of many febrile maladies, but of little or no use in advanced stages. I should advise you, with regard to the internal use of aconite, to adopt this rule: give it only in a few doses at a time, and in the initial stages of disease; never increase this dose largely, with the hope of obtaining better results from a large dose than you have been able to get with a small one. It is of more apparent benefit in throat catarrhs than in nasal or laryngeal catarrhs. I should rely, in the treatment of acute coryza, rather on opium and quinine; but in children, and in persons who cannot take opium or quinine, you may give aconite, in the way I have stated, with advantage.

Camphor is a popular remedy for coryza; a few drops of the spirits of camphor, dropped on sugar or taken in water, every half hour, will in certain persons arrest a cold in the head, if taken in the initial stage; but it is useless when the stage is passed, and not to be compared in efficacy with opium or morphia, given in the manner I have enjoined. Several cases are on record of poisoning by so-called homœopathic tincture of camphor, taken, in repeated doses, for this purpose.

There is what is called the *dry* cure, which was introduced by Dr. C. J. B. Williams. It consists in stopping the supplies of all liquids; and so, by not adding any water to the blood, while the system withdraws from the blood the fluid required for the natural secretions, the quantity of fluid in the blood vessels is diminished and the local hyperæmia thereby lessened. The catarrh ceases because the supply of fluid to the blood is cut off! The amount of fluid permitted was a tablespoonful of milk or tea with the morning and evening meals, and a wine glassful of water at bedtime. But this has never been a popular method—the remedy appearing to many persons worse than the disease.

(3) Lastly, we have to consider the action of *Remedies applied Locally.* It is rarely necessary to apply any local treatment to acute nasal catarrhs, such treatment is more useful in the chronic forms of catarrh.

A common and popular method of attempting to cut short an attack of coryza is to inhale the vapor given off by a mixture of ammonia, carbolic acid, and rectified spirit. This mixture is dropped upon some absorbent substance introduced into a bottle and the vapor given off is inhaled by the nostrils. When there is much distress from swelling and dryness of the nasal mucous membrane, relief may be obtained by the inhalation of moist soothing vapors; the vapors of hot water, or of infusion of camomile, or of elder flowers, or of the decoction of poppy heads. These vapors may be inhaled from the orifice of a narrow-mouthed jug, which, together with the mouth and nose of the patient are covered with a towel, or they may be conducted directly to the nostrils by an india rubber tube connecting with the steam generating apparatus.

When the secretion is profuse and the nostrils feel blocked up, benefit is sometimes obtained by the application of a warm spray of a weak solution of common salt or carbonate of soda (2 to 6 grains to the ounce), or Ems water, for a quarter of an hour at a time, for four or five times a day. Some have strongly recommended the snuffing up of a powder composed of bismuth, tragacanth powder and morphine, in the early stage of nasal catarrh. But many persons object strongly to the introduction of a sticky powder into the nostrils.

You will often find during or after an attack of acute nasal catarrh, that the catarrhal condition will extend into the pharynx and spread not unfrequently to the mucous membrane of the upper part of the larynx. The patient will then complain of an uncomfortable feeling in the throat, especially in swallowing his saliva, and he will often also be tormented by a troublesome tickling cough. This cough is generally aggravated during and after meals, and is particularly annoying on lying down in bed at night. On looking into the throat you will usually find the soft palate and uvula somewhat relaxed, a spongy aspect about the tonsils, and the mucous membrane of the pharynx redder than usual and covered with whitish mucus in patches or streaks. The reason why, in some of these cases, the patient only complains of cough when he assumes the horizontal position is because then the larynx falls back against the posterior wall of the pharynx, and the drainage of the catarrhal secretion from the pharynx instead of flowing off by the œsophagus, trickles into the aperature of the larynx, and so excites

cough. Sometimes the trailing of an elongated uvule has the same effect.

When the cough is brought on by eating and drinking, the catarrhal state has probably extended to the upper part of the larynx, and the increased supply of fluid and nutritive material to the blood is attended by increased fulness of the vessels, and increased secretion from the catarrhal surface, thus giving rise to cough for its expulsion. Local treatment is of especial value in relieving these conditions. The mucous membrane should be cleansed of the more or less tenacious mucus adherent to it by alkaline sprays or gargles. Warm Ems and Barboule Water are both good for this purpose; or a warm spray of a solution of carbonate soda, 5 to 10 grains to the oz., to which a few grains of common salt and a few drops of glycerine are added may be advantageously used. These solutions may be applied by means of a hand spray or a Seigle's steam spray producer The mucus membrane having been thus cleansed by these alkaline sprays, astringent applications will now take much greater effect on the dilated vessels, and gargles and sprays of solution of alum, or tannin, or perchloride of iron will be found useful. Or stronger solutions may be applied directly to the pharynx by means of brushes. The glycerine of tannin of the British Pharmacopœia is a good application in some cases.

In some instances gargles containing both alkaline and astringent ingredients prove very serviceable, and many patients prefer them to the trouble of spraying. A good gargle for this purpose consists of 1 drachm of chlorate of potash, 2 drachms of aromatic spirits of ammonia, and half an ounce of tincture of catechu to 8 ozs. of water. Another good form consists of half-an-ounce of glycerine of borax, 1 drachm of chlorate of potash, half-an ounce of tincture of thatany, and 8 ozs. of water.

If there is much laryngeal irritation an occasional lozenge of morphine and ipecacuanha will usually allay it. But in troublesome cases, you will find one of the most reliable resources for getting rid of the catarrh, and with it the teasing cough, is to brush the mucous membrane of the pharynx, the posterior surface of the soft palate and the upper part of the larynx, so far as it is readily accessible, with a solution of nitrate of silver, 10 grains to the ounce. I have found this expedient give speedy relief when other measures have failed.

Gargling the throat with ice-water before setting down to a meal, or before going to bed, will often in slight cases, prevent the attacks of cough of which I have spoken. In similar instances a gargle of port wine after a meal is both pleasant and serviceable.—*Medical Times*.

ON A NEW METHOD OF TREATING SPRAINS.

By Thomas L. Shearer, M.B., C.M., Edin., Baltimore, U. S.

Everyone who has sprains to treat in practice must have been at times annoyed by the slowness of recovery of the injured part. This is not so important in hospital patients, many of whom, enjoying the life, diet, &c., of these institutions, do not object to prolonged treatment; but in the wealthier classes in private practice the surgeon must often hear complaints that the injury is so long in recovering. I have had a considerable number of sprained limbs to treat, and after employing the usual plans of treatment, was led to adopt a new agent—clay. The clay is simply that used for making bricks, free from gravel, dried, and finely pulverized in a mortar. The powdered clay is mixed with water so as to form a thick and moist consistence. This is spread on muslin to the depth of a quarter of an inch, and applied entirely around the part. Over this is applied a rubber roller bandage, just lightly enough to keep the dressing from shifting and to retain the moisture. At the end of twenty-four or thirty-six hours the dressing must be renewed. It may be well to relate a few cases by way of illustration.

Case 1.—Mr. T———, aged fifty-eight, was thrown from his carriage, and, in addition to other injuries, received a severe sprain of his ankle, completely in capacitating him from motion of any kind. The part was hard, swollen, intensely painful, and throbbing. The dressing, as above described, was applied, and in twenty-four hours the pain was almost entirely gone, and the swelling to a great degree had subsided. The dressing was renewed daily, and in eight days the patient was going about tending to his business The part was free from pain and natural in every respect.

Case 2.—Mr. Mc C——, aged sixty, slipped and sprained his ankle so severely as to confine him to bed. The treatment was the same as that employed in Case 1, and the patient was out and walking in the streets in ten days.

Case 3.—Mrs. A———, aged seventy-four, in stepping from her carriage missed her footing, and twisted her left knee violently. In a few hours the part was greatly swollen, hot, throbbing and painful; the least motion of the joint caused excruciating agony. Pressure over ligament was especially painful. Next day I saw the patient, and applied the clay dressing. The day after the patient was much easier, the swelling rapidly subsiding. The pain was almost *nil*, and the movement of the part was not followed by such distress. The lady was walking in her house in ten days after the injury.

Dr. Hewson, of Philadelphia, about ten years ago introduced earth as a means of treating fibroid tumors of the uterus, and also sprinkled burns with the dry earth, claiming that the tendency to deformity in the latter cases was lessened. However, I am not aware of sprains being previously dressed with clay, and it was thought as well to lay the efficacy of the method before the profession. A number of other cases could be cited, but they would simply be a repetition of those already mentioned. While speaking of clay, it would, perhaps

not be amiss to state that the powdered dried earth sprinkled on the surface of an ulcer, and adhesive straps applied over it is a capital dressing for cases which are so weak that even the weakest ointment tends to break down the granulations.—*Lancet.*

ON THE TREATMENT OF CHOLERA.

By the EDITOR OF THE *Lancet.*

Our object is not so much with questions of disinfection as with strictly medical questions of treatment. There is one point on which Dr. Koch is in practical agreement with medical practitioners—that is, the wisdom of rectifying all ordinary gastric and intestinal disorders during the prevalence of cholera. Nothing is more striking in his conclusions than the bactericidal function of the human stomach when in health and when reasonably treated by its owner. He never found the comma bacillus in the vomited matters, except where he had reason to suspect that they contained accidentally some fæcal contaminations. The stomach which is affected with gastric catarrh, whether from drinking or overeating, chill, or other cause, is likely to supply an amount of mucous-protection to the cholera bacillus which will secure its transmission unkilled into the intestine, especially the ileum, there to do its deadly work. It is an old point of medical observation that drunkards and other disorderly livers fall an easy prey in times of cholera. They will do well to mend their ways in time—to live "soberly and righteously,"—and if any indigestion or dyspepsia survive such a change in their habits, to apply without delay to their medical advisers. It is a vulgar impression in cholera times that nips of brandy have a preventative effect. Nothing can be more incorrect. Such a practice would be well calculated to produce that gastric catarrh which, as Koch and all other practitioners of experience agree, is most apt to give the cholera poison its best chance of operating upon the intestine.

There is nothing in Koch's researches contradicting the general opinion of the profession that by far the best thing in cholera epidemics is to take measures to bring such cases of diarrhœa under early treatment, and to employ such remedies as are of a corrective and astringent character. The College of Physicians has done good service in recommending that in any place visited with cholera house-to-house visitation should be instituted. In this way not only are cases of diarrhœa prevented from drifting, but opportunity is gained for seeing the homes in which they occur. The nature of the remedies to be used for diarrhœa will vary somewhat according to the nature of the case and the judgment of the practitioner. In some cases of gastro-intestinal catarrh, with little evacuation, such medicaments as bismuth and soda will be enough to correct the disorder, but where copious fluid evacuations from the intestine have begun they should be regarded as in themselves serious and first objects of treatment. No doubt there are cases of cholera, especially in the East, fatal without these, or in which the evacuations are disproportionate to the shock and collapse. But this is not the rule in this country, and indeed is exceptional. In the great majority of cases where the evacuations can be early controlled the constitution of the blood is preserved and the disease may be cured. Where there is not much vomiting, the chalk mixture with a few minims of tincture of opium will often suffice. In later epidemics, undoubtedly, the dilute sulphuric acid mixture has been rather preferred, especially where there is much sickness. More effective than either in many cases, and more easily retained in cases of sickness, is a small pill of solid opium and acetate of lead in the proportion of half a grain, to two, three, or even four grains of acetate of lead. The diet should be of a light and unirritating character; the patient should lie in bed, and have a large linseed-meal poultice applied to his abdomen; cold water should be freely allowed in quantities short of those which might excite vomiting; where that is not borne, ice is of great use.

When the stage of diarrhœa is passed, much more complicated changes and lesions have to be realised, and a wise treatment becomes increasingly difficult. It is not the least valuable part of Koch's investigations to have given more precise pathological definition to these changes, and to have shown us that, besides deadly collapse, with lividity, suppression of urine, pyrexia, etc., we have in a large majority of cases remarkably "severe intestinal lesions" to deal with—dark reddish brown color of the mucous membrane, with superficial hemorrhages, or the mucous membrane necrosed or covered with diphtheritic patches; the contents of the intestine being sanguinolent, ichorous and putrescent. Opium here is out of place. Stimulants, too, can only be used with great caution. Food must be of an unirritating character. Mr. Macnamara recommends warm enemata of beef tea with brandy every third hour in cases where the purging has abated. Food given by the mouth may be iced, and the powers of life must be husbanded by warmth and rest.

The difficulty in the treatment of the advanced stages of cholera will have two lessons for all sensible people:—First, that what is difficult for doctors must be much more so for those who are unlearned in disease; and, secondly, that their whole efforts should be directed to giving the profession every assistance in promoting the early treatment of cases, and diffusing general intelligence as to the laws which regulate the spread of the disease.—*Lancet.*

ON THE TREATMENT OF MEASLES.

By D. MACLEAN, M.D., Glas.,

Physician to the Glasgow Public Dispensary, Chest and Throat Clinique.

In the present prevalence of this disease it may not be out of place to call attention to a method of treatment which has been found, in my hands, of what might be called universal success. Considering that this disease is one that must be passed through by almost all members of the human family at some period of their existence, we may take it for granted that it is something essential that the human frame should undergo for the purpose of perfect health. Taking also for granted that it is the cause of cutting short many lives, it behoves us to take advantage of every means that can abbreviate the duration of the disease and diminish the mortality which so unhappily springs from it. We see every now and again in the journals and newspapers that an epidemic of measles has taken place in such and such a quarter, and that it was necessary to close the schools, etc. Nor is it only in our own country that we learn of so many deaths taking place, but we read of how its fearful ravages decimate whole populations, such as have recently taken place in Fiji. It thus seems essential that any form of treatment (for we cannot apparently prevent the onset) that can diminish the mortality must be of paramount importance whenever these epidemic or even sporadic cases appear. The form of treatment which I propose to lay before the members of our profession, and the remedies which I have been in the habit of using for a good many years, will enable them to try the same in their own practices, and ultimately refute or corroborate the conclusions I have long ago arrived at.

As this disease is considered one of the zymotic class, we have in its treatment to consider principally two things—(1) the management of the ferment, or whatever it is; and (2) the management of the effects of this ferment upon the system. The most marked of these latter present themselves to us in the effects of the ailment upon the mucous membranes. The greatest action of the disease, as we all know, is upon the mucous membrane of the lungs, and it is from its action there we have the immediate cause of the ensuing death, or the prolonged ill-health afterwards. We have thus clearly set before us the line of action to follow:—(1) To relieve the congestion of the mucous membrane, which is the immediate cause of danger; and (2) to destroy or reduce the violence of the disease itself. This I have been in the habit of doing, I believe successfully, by giving (say to a child of two or three years of age) a teaspoonful in water of the following mixture every three hours:—Ipecacuanha wine, half a drachm; syrup of squills, half an ounce; quinine, two grains; acetate of ammonia solution two ounces. Of course the quinine is increased according to age. We have thus in this mixture a stimulating expectorant and diaphoretic to relieve the tension in the mucous membranes and the skin, and also in the quinine a specific to destroy or abate the violence of the primary ferment. It may be necessary to add to or modify the form in which this plan of treatment is carried out; as when the irritation and cough are persistently great, then the addition of a little tincture of hyoscyamus is all that is necessary. So with the quinine; sometimes the stomach is so irritable that it is necessary to omit it from the mixture; but as it is essential that it be introduced into the system for the destruction of the ferment it can be administered separately by giving it in powder, mixed with saccharated carbonate of iron, which diminishes the irritant action of the quinine that takes place when the drug is given alone.

This form of treatment for measles is good in all types of the disease, whether the attack be mild or severe, and more especially valuable when we have that dangerous form in which the eruption is of a deep-purplish color, a form which is generally recognized as being the most fatal. This style of treatment I have followed for a number of years. I have seen many cases, and, as a justification for submitting it to the notice of the profession, I do not remember having signed a certificate of death for either the disease itself or its effects.

THE CURE OF ASTHMA.

By RICHARD B. FAULKNER, M.D., PITTSBURG, PA.

From the *Medical Record*, 24, 1885:—I understand by the term asthma the condition of spasm of the bronchial tubes of both lungs, with hyperæmia approaching or amounting to inflammation, accompanied by râles upon both inspiration and expiration, with great difficulty of breathing. And the term is applied to the paroxysm alone, which returns at regular or irregular periods. Disturbance of function or disease of structure of the pneumogastric nerve is always present.

To cure the paroxysms I originated a method of treatment nearly five years ago, and repeated observation has confirmed its great utility. When called to a case of asthma, with a camel's-hair brush I make a streak of Churchill's iodine over each pneumogastric nerve, in its course in the neck, from the upper part of the thyroid cartilage to the upper borders of the clavicles. By counter-irritation thus applied, the capricious and abnormal exercise of nerve-force by the pulmonary filaments is controlled, and bronchial spasm promptly relinquished. Such is my original method—simple, certain, quick. Churchill's tincture is the best counter-irritant, because, first, it is convenient; second, its action is easily controlled; third, it does the work. To permanently cure the paroxysms, it is usually necessary to remove the underlying morbid condition upon which they depend or are associated.

SIMPLE INFLAMMATORY TONSILLITIS.

A modification of the guaiac treatment, which consists in the use, as a gargle, of a mixture known in the House Pharmacopœia of the Philadelphia Polyclinic as the gargarysma Guaiac Composita, is highly recommended in the treatment of this affection by Dr. J. Solis Cohen. Two fluid drachms each of the ammoniated tincture of guaiac and the compound tincture of cinchona are mixed with six fluid drachms of clarified honey, and shaken together until the sides of the containing vessel are well greased. A solution, consisting of eighty grains of chlorate of potassium in sufficient water to make four fluid ounces, is then gradually added, the shaking being continued.

Without due care in the preparation of this solution the resin will be precipitated. Gargle with this mixture freely and frequently, and at intervals of one-half to three hours. In some cases a saline cathartic is first administered. Should any of the guaiac mixture be swallowed it is considered rather beneficial than otherwise, and in some cases it is advised to swallow some of it. Relief is usually experienced in a few hours.

For some time past Henry G. Houston, M. D., (*Atlantic Journal of Medicine*) has been using eucalyptus in case of quinsy with very gratifying results. Dilute one ounce of the fluid extract with one drachm of warm water, and use as a gargle or spray every twenty minutes. The water must be as warm as the patient can bear it.

It has been his good fortune to see all the cases so treated recover speedily, without suppuration

No other remedy was used, except in one instance, when he prescribed quinine.

He suggests that, owing to its antiseptic properties and its special action on the respiratory tract, eucalyptus would be an excellent local application in diphtheria, either used as above or to medicate vapor for inhalation.—*Medical Age, November 26, 1883.*

ADMINISTRATION OF QUININE.

The following summary gives the pith of notes on the administration of quinine contributed by David Young, of Rome, to the *London Practitioner :*

(1.) Never to give quinine in antipyretic doses in cases where the bowels are confined and the secretion of urine is scanty.

(2.) In cases where it is being administered and an increase of dose is desirable, this may be safely done if the skin, bowels and kidneys maintain their normal functional activity.

(3.) In many cases of remittent and intermittent fevers the combination of the drug with chloride of ammonium or a salt of potash or soda is likely to be more easily tolerated, as well as more useful, than if it be administered in a pure form.

(4.) During the administration of quinine, should a headache come on or increase in intensity, the case requires the most careful attention.—*Boston Med. and Surg. Journal Nov. 8, 1883.*

TREATMENT OF ECZEMA OF THE GENITALIA; PRURITUS AND LEUCORRHEA.

In cases of eczema, in which glyceroles and unguents have failed, the following formula has been successful :

Chlorate of potassium, ...30 grains.
Wine of opium,.....50 grains.
Pure water,..... 1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation precede this with warm hip-baths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of equal parts of tincture of iodine and iodide of potassium, in a quart of warm tar-water (tar-water holding the iodine in solution), used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea, two or three tablespoonfuls (in a quart of warm water morning and evening, as an injection) of the following formula will be found useful :

Chlorate of potassium,..... ..13 parts.
Wine of opium, ...10 parts.
Tar-water,..... 300 parts.

Or,

White vinegar (or wine),.....300 parts.
Tinct. eucalyptus,..... 45 parts.
Acid. salicylic,..... 1 part.
Salicylate of sodium,..... 20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day —*Obstetric Gazette.*

HOW TO SHRINK HYPERTROPHIED TONSILS BY CAUSTIC APPLICATION.

Among the various caustics for local use in causing shrinkage of tonsillar hypertrophies, Dr. Chisholm (*Virginia Medical Monthly*) has found the chloride of zinc the most available and the least annoying to the patient. He employs it in the following manner : A wire, the size of a fine knitting needle, is roughened for a half in from one end, so that it may hold a fibre of absorbent cotton twisted upon it. Dip this into a saturated solution of chloride of zinc, and thrust it to the very bottom of the crypt, and keep it there several seconds. When withdrawn the whitened orifice marks the cauterization. By renewing the cotton for each follicle, several may be thoroughly cauterized at the same sitting, without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after destructive cauterization has been made to the interior of the follicles.—*The Medical Record.*

TREATMENT OF FISTULA IN ANO.

Dr. Poingt claims *(Le Courrier Medical)* that any fistula amenable to treatment by the elastic ligature may be cured by simple drainage of the fistulous tract. The drainage-tube is inserted by means of a stylet passed up the tract from the external opening. At the end of two or three weeks the drainage-tube falls out, after having destroyed the superficial wall of the fistula. A granulating surface of small extent is left, which gradually heals by cicatrization. The procedure is wholly painless, and the patient may pursue his ordinary avocations during the entire course of treatment. The operation is never followed by any of those serious complications sometimes seen after the cutting operation. *Medical Record.*

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VOLUNTEER MILITARY MEDICAL OFFICERS.

The rebellion in the North West, necessitating the dispatching to the front of nearly five thousand of the Volunteer Militia of Canada, has rendered necessary the organization of a very considerable medical force, to attend to the relief of the sick and wounded. For this work a series of ambulance corps have been organised, and the number of medical men who have volunteered for this service has been very greatly in excess of those required. A number of dressers have been attached to these ambulance corps, being selected from advanced medical students, who have shown an equal enthusiasm in coming forward to take part in the noble work of relieving the medical necessities of our gallant Volunteers. All this medical organization is independent of the medical and surgical equipment of each corps which has taken the field—each of course having its Regimental Surgeon and Assistant Surgeon. We are pleased to notice that, with few exceptions, the Regimental Medical officers who appear in the Militia List have proceeded to the front. A Montreal Battalion, the 65th, we regret to say was, we believe, the first to make an exception to this rule. When this Battalion left our city it took with it two Surgeons who went as substitutes for the gazetted Regimental Surgeons. We believe one of these Regimental Surgeons had a reasonable excuse in the very delicate condition of his health, but we have not heard any reason assigned why the other did not obey the call of duty. Halifax next becomes notorious in this respect, the surgeon who declined to accompany his regiment being, it is said, presented with a considerable number of white feathers. Eventually so excited did the recreant medico become under the castigation of public opinion, that he assaulted in the public street a brother M.D., whom he believed to have been loud in denouncing his conduct. The ordering to the North-West of the Montreal Garrison Artillery has again brought our city disagreeably to the front in this respect. On the 11th of May this Battalion started, leaving behind both its medical officers, and taking with them substitutes for these gentlemen, in the persons of two gallant young medicos. This has given rise to a large amount of talk, which has not been of a character very complimentary to those who, in the hour of trial, failed to fulfil their duty, and has reflected unfavorably on the entire medical profession o Montreal. A volunteer medical officer, when he accepts her Majesty's commission, takes upon himself an obligation of a very responsible character. Of all the officers of a Volunteer regiment he is the one that could be most easily dispensed with so long as his corps is not in active service in the field or in camp. Even in the latter case, were it not that it gives him some slight insight into the duties he would have to perform in the field, his services might be dispensed with and the slight ailments of the men attended to by a local practitioner. But the Government places him on the strength of his regiment, pays him his annual drill money—not that he may attend balls and levees clothed in the Queen's uniform but that he may learn something of the interior economy of his department and familiarise himself with those duties which are peculiar to his position. All this is done so that

when his Regiment is called upon for service he may enter upon his work having some idea of its character. It is at this period that the medical officer of a corps becomes a useful appendage of their regiment. To fail to perform their duty at such a time, and to be replaced by perfectly green hands, is a very serious matter, and one which we think deserves, as it is receiving, all but universal condemnation. What right, we ask, has the surgeon of a corps to absent himself from his post at such a time as this? If the other officers must go, why not the surgeons? We trust we have seen the last of those evasions of duty on the part of Medical volunteer officers. If it is again attempted we trust those in authority will show that they understand their duty in such cases.

CHOLERA.

In March, 1866, pursuant to an order of the Governor-General in Council, the Minister of Agriculture convened a Medical Conference, to discuss the cholera question in all its bearings and report thereon. The Members of this Conference were: Dr. Macdonnell, Chairman; Dr. Taché, Secretary; Drs. Van Cortland, Hill, Landry, Dickson, Aikins, Beaubien, and Grant. Their report was so complete and exhaustive that it was printed by the Bureau of Agriculture in 1866, and reprinted in 1878. A very slight revision would bring it up to date. It is interesting to note that the appointment of Government Health Officers on board all vessels landing passengers at Quebec was suggested by the Conference as an important preventive measure. The following extract embodies their views:—

"The point at which a quarantine is of all importance, as proved by the constant experience of former epidemics, is on the St. Lawrence at the entrance of the port of Quebec. The Government possesses already, and very fortunately at that very point, an admirable establishment which only requires to be made at times of more than ordinary dangers adequate to the circumstances. A better selection for a quarantine than the Grosse Isle station cannot be made, situated as it is at some thirty odd miles from Quebec, on an island of about 600 acres superficies, with deep water and good anchorage, at least three miles distant from any parish or village, and yet sufficiently near to prompt and commodious public means of communication. There can be practised a reasonable sequestration, embracing on one side the relative security from infection which quarantine measures can afford, and on the other side, neither vexatious nor ruinous to commerce and international intercourse.

* * * * * There is, as connected with the quarantine, a question on which it is important that the public should possess some practical information, in order to prevent one-sided notions taking possession of the public mind, and thus becoming a subject of very serious embarrassment. This question may be thus written: what rules shall apply to steamers of passenger lines frequenting the ports of Quebec and Montreal, one of which is subsidized by our Government and carries our European weekly mail? It seems impossible to exempt them entirely from quarantine when coming from a country laboring under the scourge; but a strict quarantine for such ships may prove very disastrous even absolutely ruinous for the Company and calamitous for commerce in general. This simple expose of the question at once suggests that it is one of no small importance and one which is fraught with serious difficulties. Without any attempt to solve the question, it will not prove useless, it is hoped, to suggest a measure the adoption of which may result (if not always, at least in several instances) in the avoidance of the greatest danger on the one side, and of immense losses to the Company, passenger and merchants on the other. This measure is suggested by the practice for a long time adopted by the Austrian Government towards their company of steamers trading between Smyrna and Trieste. To follow this practice would require that a special Medical Health Officer is placed on board each steamer; it will then be, whether there is disease or not on board, assimilated to a quarantine station—this officer to be appointed by Government at the first warning of cholera, for a limited required time, besides the ordinary physicians of the ship. During the storage of the cargo, sanitary precautions would have to be enforced, and preventive disinfection practised in a way not to damage the goods.....Every day of the passage sanitary measures would have to be resorted to, according to the regulations made to that effect; and, amongst others, the goods and effects of the passengers in daily use would have to be ventilated on deck. In the case of five days having elapsed since the last attack of cholera on board, at the moment of arrival at Grosse Isle all those yet on sick and conval-

escent lists being landed, the ships, without further detention, would be permitted to proceed to Quebec, and, if free from cholera on her arrival at Quebec, be allowed to pratique ; if not free from cholera, ordered to remain at anchor at the mouth of the St. Charles, to be dealt with according to the orders of the inspecting physician at the port, after consultation with the Quebec Board of Health. In the case of detention at Grosse Isle a shorter period, less stringent measures of purification to be adopted for these ships than with ordinary vessels. Even partial admission to pratique might be allowed them.

The recommendations of the Conference, though not as far reaching as we would like, are nevertheless a step in the right direction. If the quarantine arrangements at Grosse Isle are to succeed in preventing cholera from invading the country by way of the St. Lawrence, all ocean vessels carrying passengers from infected countries must be compelled to submit to one of two courses—either: 1. A fourteen-days quarantine when they arrive at Grosse Isle ; or, 2. The presence of a Government Health Officer throughout the voyage, who, by co-operating with the Health Authorities on both sides of the ocean, will be able to keep the ship virtually in quarantine from the beginning of the voyage. At the present time, such a scheme is imperative in the interests of the country ; in due time we hope to see the principle extended by the permanent organization of efficient Marine Medical Service under Government control for our passenger steamship lines.

SEI-I-KWAI.

That Japan has advanced in modern ideas and has taken her place as an active member of the community of nations is shown by the development of Medical Science as viewed by European and American methods of research. Among our exchanges is a monthly journal with the above title. Not understanding Chinese Hieroglyphics we are unable to furnish our readers with extracts of the proceedings of their Society. A supplement of eight pages in English is, however, appended. From the January number we gather that a society with the above name was founded in Tokia in 1881. Since then it has held 158 weekly meetings, conducted on the same plan as with our own medical societies. The society is contemplating the erection of a special building with Museum and Library. We append the following extracts :

THE IOKIO MEDICAL LIBRARY AND MUSEUM.

For many years past there has been felt in the Capital the growing necessity of a public library, in which might be found the principal foreign and native publications relating to medicine, and especially those written in the languages of the west. A medical library is no new thing in Japan, and there are several to day which contain foreign medical works ; notably among which is that of the Medical Department of the Imperial University at Tokio, which, according to a recent report, contains quite a large number of foreign medical works, mostly in German. These libraries, however, are not readily accessible to all, and with the rapidly increasing extent of medical literature, in the East as well as in the West, some readily accessible means of information as to the progress of medicine should be had by those whose business it is to teach others, as well as by those who receive instruction. This need has hitherto, in a measure, been met by the half-score of medical periodicals published in Japanese, and by a few foreign journals having a limited circulation in this country. Yet both of these are inadequate to meet the need ; the former, all devoted to Western medicine or allied sciences, and ably edited as they are, probably do not reach more than one-fifth of the practising physicians ; while it is doubtful if the circulation of foreign medical journals in Japan exceeds two hundred copies. At the same time Western medicine is gaining a great and permanent hold, and within a few years the practice of Chinese medicine will undoubtedly be a thing of the past. There is, too, a growing tendency toward the more extensive use of foreign languages in the medical schools, German having been in use in the principal course of the Medical Department of the University for a number of years past, and the knowledge of at least one Western language is fast becoming a recognized necessity among physicians. Again, the translation of a sufficient number of foreign medical works into Japanese—and much has already been done in this direction—will take years to accomplish, and then the work may require revision on account of the, at present, unsettled state of Japanese terminology. Such being the case, the encouragement of the study of medicine in those languages in which the greater part of the literature of the subject is written, namely, German, French, Italian and English, will lessen the difficulties in the way of

the student and practitioner alike, and hasten the coming of the time when Japan may begin, in a measure, to repay the debt she owes to the Western world for the wealth of learning made available to her.

The object of the establishment of this library may therefore be stated as two-fold : to encourage the more extensive reading of Western medical works, and to endeavor to raise the standard of medical literature by furnishing sources of reference now only available to very few. It is also intended to collect for reference the works of the principal writers upon the Chinese system of medicine, as well as the writings of Japanese upon Western medicine. A museum will also be added in due course of time.

As to the management of the Library, it should be stated that it is under a committee of the members of the *Sei-I-Kwai ;* and that it is intended, so soon as arrangements can be completed, to erect suitable fire-proof buildings ; meanwhile the Library has been opened at No. 11 Yariya-cho, Kiyobashi-ku, Tokio, where books, pamphlets, etc., may be sent.

It is the purpose of the Society to notice in its Transactions in Japanese, all foreign books, and in the English Supplement all Japanese works purchased for, or donated to the Library.

GLYCERINE FOR DRYNESS OF TONGUE AND THIRST IN FEBRILE STATES.

From a foreign exchange we learn that Surgeon Major S. K. Cotter, in a recent number of the *Indian Medical Gazette*, relates the case of a patient suffering from enteric fever who was awakened every ten minutes by the dryness of his tongue, which was parched and covered with sordes. The tongue was painted with glycerine frequently, and the result was that at the first trial the patient slept almost comfortably, waking up about every two hours with the tongue feeling dry, but not really dry to the touch ; after renewed application of the glycerine he at once slept again. In six other cases it has been tried and found satisfactory. Surgeon Major Cotter does not attempt to decide whether it acts by increasing secretion from the mucous membrane, dissolving the sordes, or making an artificial coating. But, in whatever way it acts, its benefit is vouched for when the tongue is parched during any disease.

ILLINOIS STATE BOARD OF HEALTH.

This Board has sent us a quarterly report of its proceedings for the period ending April, 1885. In a previous issue we drew attention to the advanced character of its work, which is far ahead of anything attempted by any other State or Province in America. Though this Province has done something for sanitation we fear that a long time will elapse before our legislators will become sufficiently enlightened or patriotic to establish a like system.

MELLIN'S FOOD FOR INFANTS AND INVALIDS.

A recent analysis by Mr. G. W. Wigner, the President of the Society of Public Analysts of England, throws considerable light, not only on the composition, but on the physiological action of this popular preparation. It appears that it contains nearly 87 per cent. of dextrine, maltose, etc., soluble in cold water.

As Mr. Wigner points out, it is not a mere starch or sugar food, but a soluble preparation, containing those nitrogenous and phosphatic principles which contribute largely to the growth of bone and tissue in young children. Being thoroughly malted, it is not only readily digestible itself but actually assists in the digestion of milk and other foods with which it is mixed. It must of necessity be of great value in the case of feeble infants who cannot digest ordinary starchy foods.

Mr. Wigner's analysis has evidently been performed with great care, and is of much interest.

LOCAL ANESTHETIC.

A mixture of two drachms each of chloral and camphor, half a drachm of sulphate of morphine, and one drachm of chloroform, makes a useful anesthetic paint for minor operations. It should be applied several times with a camel-hair brush and allowed to dry before the incision of the parts.

LOCAL AND GENERAL.

Typographical and other errors in the April number, furnish no explanation of the reason why Dr. Wanless should misconstrue the evident meaning of a paragraph in the February number. I assumed of course that my readers knew that in the United States a class of empirical healers exist who call themselves Christian Scientists. They do

not give remedies, but rely upon the "influence of the mind" over disease.

A much better educated class, several members of which I have known and respected highly, are those who rely upon so-called hygienic measures and are known as Hygienic Physicians. Now, I asked the question, which I repeat for Dr. Wanless' benefit, and he may answer it, if he can; I wonder what a Christian Scientist, M.D.—(or, for the matter of that, a Homœopathic or Hygienic M.D.) would do if called to attend a case of cholera morbus?

Probably he would be sent for at 2 a.m; when on arriving at the house he would be told that the patient had been vomiting and purging for several hours, that the cramps in the stomach, legs and arms were getting unbearable, that if nothing were done for him he could not live. Of course we all know there is very little chance of his dying, and that if he were left to fight it out he would finally recover, after being thoroughly exhausted, principally by the intense pain. Now, what shall be done and what course is best? Shall we trust to infinitesimal doses of arsenic? shall we solemnly warn him to beware of indigestible food in the future? shall we endeavor to try mental remedies only, or shall we take the magic hypodermic syringe and put half a grain of morphia and 1-100 grain of atropine "where it will do most good?"

I heartily join with the Doctor in his desire for truth for its own sake. He who will sincerely and respectfully state his views in my hearing or within the circle of my influence will command my respect, and I will think of him as a brother whatever *pathy* he owes allegiance to. Speaking for myself I consider that I am bound by no man's dictum, and I would accept to-morrow the teaching of any one whom my reason and experience show me to have the right on his side. It has been my pleasure to know many heretics in my time, and I have a leaning in their direction, but I cannot think it possible for anyone to read O. W. Holmes "Currents and Counter Currents in Medicine" and believe in Homœopathy as a scientific system of medicine.

I am opposed to much of what commonly passes for charity; in our day; I would not do *everything* for the poor; I would rather try to help them to help themselves. Instead, therefore, of asking her rich neighbors to meet all the expenses of such an organization I would suggest that the recipient of the assistance be informed that she would be expected to contribute what she thought she could afford towards the wages of her nurse. I think that the amount, if any, to be paid might be fixed by the medical attendant, who would be likely to know something of the circumstances of his patient.

One of the best suggestions I have ever heard, and one which I would greatly like to see carried out in this city, has been made by Dr. John P. Gray of the Utica Institution for the Insane. He insists that for at least a month after her confinement a woman should be entirely free from toil, worry and anxiety, and that she should during that time at least have a generous and suitable diet. That these necessities, which are beyond the reach of most poor women, may be obtainable he advises the employment, by an association, of women of the same social class to do the housework and to be paid for it by this association. This is what he says in support of his views: "If women knew they would have all needed care, not in a hospital, with its necessary publicity and separation from home, but in their own homes and among their families, and without the notoriety of their condition, what a burden would be lifted, what health saved, and what instanity prevented."

The *Medical News*, referring to the subject, says:—"The conviction appears to be gaining ground that, in view of the great fatality of acute diffused peritonitis, and the futility of ordinary modes of treatment, laparotomy should be resorted to, thereby placing effusions into the peritoneal cavity on the same footing as pleural effusions. Its success in cases of peritonitis complicated by the presence of an ovarion tumor has long been established; and Mr. Lawson Tait states, in the *British Medical Journal* of March 21st, that he has opened the abdomen in not less than 44 cases on account of peritonitis, and that 41 recovered."

Small pox is slowly but surely spreading over this city, and it is to be hoped that Dr. Bessey

and the other public vaccinator will be able to vaccinate all those who require that prophylactic operation. At the same time I am still of the opinion that it would have been better to have retained the vaccinators previously appointed, as there will be work enough and to spare for all of them.

Of the propriety of Dr. Bessey's appointment there can be no doubt, but his time would have been more profitably expended in the propagation of reliable vaccine.

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Dr. Wanless promises to tell me how he would treat a case of cholera morbus, and then immediately goes on to discuss the relative value of homœopathic and allopathic treatment of a very different disease, viz., Asiatic cholera. Now McLachlan's report, if it prove anything, simply goes to show that the allopathic treatment of true cholera, as he saw it, was worse than none at all, and I freely confess that I do not think, and have never thought, that it is or has been much better. In other words Dr. Wanless, in their sincere desire to find a remedy for this dreadful disease certain medical men did more harm than those who, equally sincere, deluded themselves into thinking they were giving remedies but were not. I do not believe that any remedy has yet been discovered which exercises any appreciable effect upon true cholera.

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L'Union Medicale for April has a common sense editorial on the relief of the pains of labor. The writer refers to M. Doléris' experience with cocaine, where relief from the pain was marked in six out of eight cases. The remedy was applied directly to the uterine neck during dilatation. I should imagine that the great cost of the drug would be a serious drawback to its use in any large quantity.

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I have always insisted that burning sulphur in the sick room, after infectious diseases, should only be employed as an adjunct to further disinfection. The germicide power of dry sulphurous oxide is low, and its action on many microbes is practically nil. I quote the following from the report prepared by the Chairman of the Committee on Disinfectants of the American Public Health Association :—"Fumigation with sulphurous acid gas alone, as commonly practised, cannot be relied upon for the disinfection of the sick room and its contents, including bedding, furniture, infected clothing, etc., as is popularly believed. To secure any results of value, it will be necessary to close the apartment to be disinfected as completely as possible, by stopping all apertures, and to burn not less than three pounds of sulphur for each 1,000 cubic feet of air space in the room." The report advises that the wood work in the room should, in addition, be thoroughly washed with a 1 to 1,000 solution of mercuric chloride, and then after 24 hours scrubbed with soap and hot water. The clothing should also be subjected to the action of disinfecting agents.

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None of the regular surgeons attached to the two regiments ordered on active service from Montreal have gone to the North-West with their corps. It is a question whether it is desirable that medical men with large practice should be forced to leave it for several months, and yet the other alternative—resignation in the very face of duty—must appear to the public to be equally undesirable. I suppose, however, that every man must settle this question for himself.

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As I stood by the bedside of a patient dying from an attack of suppurative peritonitis the thought occurred to me that such cases might furnish legitimate scope for the operation of laparotomy. Shortly afterwards I came across an account of Dr. Treves' recent address before the Royal Medical and Chirurgical Society, in which he reports the case of a woman whose abdominal cavity was successfully opened and freely irrigated with water and a drainage tube inserted, on account of diffuse peritonitis, the result of the bursting of a pelvic abscess. In the discussion which followed Bryant, Thornton, Powell and others commended the practice of Mr. Treves. Mr. Howard Marsh also read notes of the case of a young man, aged nineteen, who was suddenly seized with symptoms of acute peritonitis. An incision into the abdomen was followed by the discharge of two pints of fetid pus. The cavity was thoroughly washed out with a weak (1 to 60) solution of carbolic acid, a drainage tube was inserted, a solution of iodine (1 to 1000) was subsequently injected, and the patient recovered. I intend to employ similar treatment in the next suitable case I have.

P. A. Laver, M.D.

Montreal, May 8th, 1885.

PERSONAL.

Dr. C. E. Nelson, of New York, and lately editor of the *Planet*, has become assistant editor of the *Eastern Medical Journal*, published in Worcester, Mass. We have had occasion to mention Dr. Nelson's name a good many times, and therefore it is unnecessary to add anything more at present. The name of Nelson is a prominent one in the Medical history of Montreal, and the representatives of the family abroad have not diminished its lustre. We wish him every success in his new office, and the Journal a long subscription list.

REVIEWS.

The International Encyclopædia of Surgery: A Systematic Treatise of the Theory and Practice of Surgery, by Authors of Various Nations. Edited by JOHN ASHURST, Jr., M.D., Professor of Clinical Surgery in the University of Pennsylvania. Illustrated with Chromo-Lithographs and wood cuts. In six volumes. New York: William Wood & Co.

Vols. III., IV. and V. These volumes are large and attractive, and in every way are worthy of the success to which this truly great work has already attained. The articles are contributed by writers of wide reputation, giving in many cases a complete summary of the subjects upon which they treat. When complete they will form a valuable surgical library, as the important subjects with which they deal have not been condensed within the narrow limits usually given to text-books.

Volume III. is devoted to injuries and diseases of various tissues of the human body, muscles, tendons and fascia, Lymphatics. Injuries of blood-vessels, discussing hemorrhage, vascular inflammations and gangrenes, resulting from traumatic lesions. This very extensive article is from the pen of Dr. John A. Liddel, late Surgeon of Bellevue Hospital, &c., and contains the sum and substance of the treatment of such injuries. Dr. John A. Wyeth contributes the article on Surgical Diseases of the Vascular System. That on Aneurism, by Richard Barwell, F.R.C.S., is also an exhaustive treatise of great practical value. Injuries and Diseases of Nerves is by M. Nicaise, of Paris. The concluding article in the volume is by Dr. Edmund Andrews, of Chicago, on Injuries of the Joints, include Dislocations, Sprains and Wounds of the Articulations.

Volume IV. opens with a long and carefully digested article upon Injuries of Bones by Dr John H. Packard, of Philadelphia. The various forms of fractures and modes of treatment are thoroughly discussed. Dr. Barwell, of London, on Diseases of the Joints, gives the different forms of synovitis; joint diseases due to osteitis, to syphilis and nerve disease. Dr. Ashurst, the able editor of this work, contributes the article on Excision and Resections; Dr. Fenwick, who was expected to furnish this article, having appended a chapter on his own method of excising the knee-joint. Tumors, by Henry T. Butlin, F.R.C.S. Injuries of the Back by John A. Liddel, and Malformations of Diseases of the Spine, by Frederick Welles, F.R.C.S., concludes this volume.

Volume V. The fifth volume of this truly great work fully equals, if it does not exceed, in interest the preceding numbers. A large portion of this volume is occupied by special surgery. There are fourteen articles, half the contributions emanating from the pen of English surgeons, the remainder being American.

The present issue of this large work is occupied with the surgery of the head and its parts, of the neck, chest, breasts, and abdomen, including hernia. Dr. C. B. Nancrede writes on injuries of the head; Mr. F. Treves on malformations and diseases of the head; Dr. E. Williams on diseases and injuries of the eye; Dr. A. H. Buck on diseases and injuries of the ear; Dr. Geo. M. Mefferts on the nose and sinuses; Dr. A. C. Post on the surgery of the face, cheeks, and lips; Mr. Christopher Heath on the mouth, fauces, tongue, palate, and jaws; Dr. N. W. Kingsley on the teeth and adjacent parts; Dr. Geo. H. B. Macleod on the surgery of the neck; Dr. J. Solis-Cohen on the air-passages; Dr. E. H. Bennett on injuries of the chest; Mr. T. Annandale on injuries of the breast; Mr. Henry Morris on injuries and diseases of the abdomen; and Mr. John Wood, of King's College, London, on hernia.

The article on Diseases of the Abdomen is perhaps the most interesting and valuable, owing to recent advances in abdominal surgery. This subject covers nearly 300 pages. It is impossible, for want of space, to do justice to the monographs which comprise these volumes. One more volume will conclude the series, and there is now no doubt that this encyclopædia fully realizes the expectations that were formed of it. The Publish-

ers have done their part well, and the able supervision of the Editor has left nothing to be desired.

Modern Therapeutics of the Diseases of Children, with Observations on the Hygiene of Infancy. By Joseph F. Edwards, M.D. Philadelphia: D. G. Brinton, 1885.

This is the fourth of Dr. Brinton's "Modern Therapeutics" Series, and is a companion volume to Naphey's Surgical Therapeutics and Atkinson's Medical Therapeutics, which have already run through seven or eight editions. Culled chiefly from periodical literature and monographs, these books present in convenient form the treatments of representative men at home and abroad; being therefore almost encyclopædic in character, they are valuable as works of reference to those who have not access to a large library.

The Influence of Sea-Voyaging upon the Genito-Uterine Functions. By J. A. Irwin, M.A., M.D., New York: Trow's Printing Co., 1885.

We have received from Dr. Irwin the advanced sheets of his essay read before the Co. Med. Society of New York at its last meeting. Coming most appropriately at the opening of the summer tourist season, it is well worth careful perusal. An ocean voyage is often prescribed empirically for the relief of tedious or obscure uterine troubles, with a sort of vague hope that change of scene and air may somehow prove beneficial; but the experiment is frequently unsuccessful, and the patient returns with symptoms unimproved, sometimes aggravated. Such disappointments could be easily avoided by carefully studying the therapeutic effects of sea-voyaging, and recommending it only in suitable cases.

While ship-surgeon on several first class passenger lines, a large number of female passengers have come under his care. That he has utilised his opportunities for observation, may be gathered from the fact that he has collected the records of 104 pregnancies, 11 parturitions, 3 miscarriages and 451 menstruations or missed periods among women whose functions were usually normal.

Though recognising physical and atmospheric influences, he nevertheless attributes the chief effects of a sea-voyage to the ship's motion. His theory of seasickness (*Kinetia*), first published in the *Lancet* in 1881, is well known and now pretty generally adopted. It may be summarized as follows:

"The ordinary form of seasickness, that is the form caused by the easy gyrations of a large ocean steamer is essentially *a disturbance of equilibration.*

The initial lesion takes place within the semicircular canals of the internal ear, where the endolymph and otoliths, following the irregular moves ments of the vessel convey to the sensorium erroneous impressions of the position of the head in space; this soon results in dizziness, which is followed in due course by nausea and vomiting; and even when later, as is usual in tedious cases other parts of the organisation become involved, a hyperæmia of the parts concerned in equilibration remains a main factor in the general syneresis of nervous and functional derangement. In fact for practical purposes, seasickness may be regarded as a mild, transitory, semiphysiological prototype of the noncochlear part of Ménière's disease."

He finds the effect of sea-voyaging upon the menstrual functions to be highly stimulating, resulting in disturbance of periodicity and duration, as well as increase in quantity and degree of discomfort. In pregnant women abortion and premature labor are apt to be induced; in the non-pregnant the symptoms most commonly noticed are dysmenorrhœa, menorrhagia, a premature recurrence of the flow, and a more or less erotic tendency.

As a therapeutic agent, Dr. Irwin ranks sea-voyaging as a potent *emmenagogue*, with well marked tonic, alterative and sedative effects. He recommends it especially in cases of chloro-anæmia, amenorrhœa with deficient tone, retarded sexual maturity, certain forms of leucorrhœa uterine asthenia and sterility, and "especially in those delicate gawky over-schooled girls, in whom abeyance of uterine function is often among the first warnings of approaching phthisis."

PAMPHLETS RECEIVED.

Disinfection and Disinfectants—Preliminary Report of the American Public Health Association.

Many Drugs; Few Remedies. Geo. T. Welch, M.D.

Eulogy on the Life and Character of Lumsford Pitts Yandill. By J. A. Octerlony, A.M., M.D.

Idiopathic Anæmia. By J. H. Musser, M.D.

Bulletin of the Natural History Society of New Brunswick.

THE CANADA MEDICAL RECORD.

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Original Communications.

A CASE OF PARTIAL EPILEPSY.

By L. D. MIGNAULT, A.B., M.D., C.M., Professor of Anatomy University of Victoria, etc., etc.

(Read before the Medico-Chirurgical Society of Montreal).

The occurrence of cases of transient or partial epilepsy are by no means rare, and, though less striking and so to speak, impressive than the convulsive forms, are still worthy of study, and from the mildness of the morbid process seems much easier to arrest, and perhaps cure, than the former variety.

The multiplicity of manifestations of this disease may often mask its presence and, as in the case here cited, may almost be overlooked by the patient himself.

On the 12th of last February I was summoned to see M. H., æt. 40.

He occupied a private ward in the Hotel Dieu, and came to be treated for what is called biliousness. I gave him the usual treatment, a purge, and subsequent doses of nitro-muriatic acid, and the patient left the hospital, apparently feeling much relieved, and returned to his home in Boston.

About the 25th of the same month patient returned, and complained of renewed attacks of biliousness.

The patient a few days afterwards mentioned incidentally that he suffered from occasional attacks of vertigo and fatigue. It was only some days later that he described, after several questions, the nature of these vertiginous attacks.

The seizures occurred as follows:—On a sudden, without preliminary warning, he would lose consciousness, and, being possessed of a fixed idea, would set to work to execute it mechanically. He generally fancied that it was necessary for him to go to bed. Accordingly he would seek some room where he knew a bed was situated, and would undress and get into it. As often happened, being a teacher in an orphan asylum, he would manage to crowd himself into a child's cot and would, to his intense disgust, suddenly resume consciousness and find himself cramped and stiff from the exertion.

On another occasion, while waiting for a train at a railway station, he started off to walk along the track. As he crossed a bridge stepping from sleeper to sleeper, he was loudly shouted at by several persons, but he was still unconscious, and pursued his way for about four miles when he was both astonished and amazed to find that he had wandered so far away from his destination. This feat was all the more remarkable from the fact that my patient was very lame from hip disease in childhood, and wore a boot with a cork sole which replaced the shortening of the diseased leg.

He states that the duration of these fits is from a few minutes to an hour, and that they generally occur in the day time and very irregularly. He only has had them since the last two years, and they occur simultaneously with disordered digestion and torpid liver. No premonitory symptoms ever occurred. From the statements of eye-witnesses the patient at these times becomes very pale, the eyes are wide open and have a fixed expression. He answers quietly and reasonably any question which may be addressed to him, and will often even apologize for the trouble he is giving. The

patient, who is an intelligent and serious man, avers that he has not the slightest consciousness of what occurs.

Upon questioning patient as to his history he states that at 18, while a student at college, he suffered from epileptic seizures of the convulsive form, and that they disappeared after two years of treatment. They did not interfere with his general health; and he attributed them to fatigue after severe study. Patient belongs to a healthy family, and there is no trace of any neurotic disposition.

The pathology of epilepsy came to my aid in the diagnosis of this case.

Assuming, with modern authority, that epilepsy is the result of sudden and acute anemia of the cortex, with congestion of the medulla, we may presume that in this case there is simply acute anemia of the cortex, without notable congestion of the bulb.

As it is probable that the conscious centres are located in the cortex, and moreover that all mandates of the mind are communicated to these convolutions, it is easy to explain the absence of conscious control, and the occurrence of mechanical actions. The cortex—the bond of union between mind and matter, so to say—paralysed, and the great ganglia in perfect condition, the movements are simply like the reflex spinal movements, and are called on in precisely the same manner. The diagnosis of this case seemed at first rather difficult, and I was at first inclined to believe it a case of *catalepsy*. The absence of rigidity however, and the history of the patient led me to class it among those cases termed *partial epilepsy*, and in a late number of the New York *Medical Abstract* several such cases are cited, and thus named.

The treatment employed ultimately was based upon my pathological ideas, and then alone was it successful.

I tried at first the anti-epileptic mixture of Brown-Sequard for two weeks, and the attacks were of frequent occurrence.

I then thought of treating the cerebral anemia, and gave the patient ½ gr. nitro-glycerine thrice daily. I followed in this the idea of Hammond of New York.

The results were excellent. The fits ceased, and patient passed 3 weeks without a single seizure. At the end of that time he noticed a copious deposit of lithates in the urine, with a diminution of that secretion, and the following day two seizures occurred; both were very brief in their duration. I prescribed a mixture of pot. bicarb, and all went on well as before.

The patient left shortly afterward for Boston. At last accounts he was still well, and whenever the urine became loaded he had recourse to the potash mixture, and so the fits were averted.

ATMOSPHERIC MATERIES MORBIS.

By Henry Howard, M.D.,

Consulting Physician and Government Visiting Physician to the Longue Point Asylum.

(Read before the Medico-Chirurgical Society of Montreal.)

Gentlemen—We don't know, and perhaps we never will know, what were the characteristics of primordial matter, whether if atoms or molecules or both atoms and molecules.

But this, physical science teaches us that matter, as it now is, is one, only differing in degrees, and that it is indestructible; that mineral matter furnishes the material for the vegetable matter; and that the vegetable furnishes the material for the animal. This evolution of matter shows how it is that all matter is one, only differing in degree, both structurely and chemically, and as it differs in degree so must it necessarily differ in its various phenomenon or forces or functions.

Mineral matter in itself differs in degree, structurally and chemically, and the same can be affirmed of all vegetable and animal matter; and it is because of its phenomenon that we judge of the different degrees of matter, and that we place the nervous system of man as the highest degree of matter because of its phenomena, mind and consciousness, which we find to be of a higher degree than is mind and consciousness in any other animal.

We find, then, that physical science teaches us, that all the different degrees of matter have their own peculiar structure, consequently, that each has its own peculiar phenomenon or force or function, such as psychic, motor, and sensorial phenomenon.

Under the foregoing circumstances let us consider what do we mean by the term atmospheric materies morbis. Do we mean that there is matter floating in the air, either mineral, vegetable, or animal, which is of itself a morbid or destructive matter, when coming in contact with either animal or vegetable organisms, or with both animal and

vegetable organisms. There is no physical proof that such would be the true definition of the atmospheric materies morbis.

Is it the phenomenon, or force, or function, of this floating atmospheric matter, to whose morbid effects we attribute the results we consider to be due to an atmospheric materies morbis? It is impossible, for if such were the case no living organism, be it animal or vegetable, could exist surrounded with such destructive forces. I cannot conceive, nor do I see any proof, that there is any such thing as an atmospheric materies morbis till one is generated.

That great physical scientist, Professor Tyndall demonstrated by the most conclusive experimentts that the atmosphere was filled with floating matter, which, under favorable circumstances, when it came in contact with other matter, generated or, produced a very low living animal organism. He also proved that another of its phenomenon was to transmit or conduct rays of sunlight to illuminate our planet; and,again, that this atmospheric matter could be burned by flame,—all these facts Tyndall established by experiments. But he did not demonstrate the physical characteristics of this matter as to whether it was mineral, vegetable or animal matter, or a conbination of all three.

Now, as I have already said, it is an established physical fact, that under certain circumstances in the natural order, mineral matter furnishes the material for vegetable matter, and vegetable matter furnishes the material for animal matter,—it therefore follows, from Tyndall's experiments, that this matter in the atmosphere must be vegetable matter, which, under favorable circumstances, causes decomposition of matter, of generates or produces living animal organisms, which may, or may not be, according to circumstances, a materies morbis, a germ of disease, and afterwards become an *atmospheric* materies morbis.

This is in accord with the well-established physical law of latent forces in matter, the existence of which we are frequently ignorant of till two forces come in contact with each other, and we have an explosion; it may be dynamite, it may be a fit of epilepsy, it may be an attack of mania, it may be a chick from an egg, or it may be a germ, a materies morbis, that, before its forces were exhausted, would slay its tens of thousands-but, fortunately, in time these forces are exhausted. If I am logically correct in my physics, it follows that the atmosphere, of itself, is innocent of generating a materies morbis, but that it contains matter which,when coming in contact with suitable soil,—the two forces meeting—result in a low living organism, which may or may not be a materies morbis, a germ of disease. What the characteristics of this germ will be must depend upon the nidus, which is the recipient of the atmospheric matter It is only thus can we account for the different forms of germs, those of phthisis, of typhoid fever, of cholera, of yellow fever, pneumonia and septicæmia.

Now, I do not deny the fact that any germ once formed may not be carried from one locality to the other by means of atmospheric air, as well as by any other mechanical means, such as the hands water, or clothing; but I do maintain that there is no physical evidence that atmospheric matter, or any other matter, can of itself generate a living organism—in other words, that there is no spontaneous generation.

It may be asked, why, then, use the spray or any other antiseptic treatment in surgical operations? I reply that an open wound, caused by a surgical operation on animal structure, appears to be a most suitable nidus for the atmospheric matter to come in contact with, to produce the germ of septicæmia,and the carbolic spray or other antiseptic, which has proved so successful in operative surgery, probably so changes the phenomena or function of the atmospheric matter, as to prevent the generation of the septic germ: moreover, no surgeon can be sure that there may not be septic germs in the locality in which he is operating. Under any circumstances antiseptic precautions can do no harm.

Here it appears to me that the question naturally suggest itself, how so many persons fall victims to these germanic diseases, typhoid fever, cholera, and while so many living in the same surroundings escape from these maladies.

It certainly must be due to the fact that the organs or tissues, with their functions, of the victims, must be in an abnormal state before being the recipient of the atmospheric matter, and in which a nidus is prepared, that evolves the germ and that those that escape do so because they possess normal organs, tissues, and consequently normal functions, whose forces will destroy a living germ coming in contact with them, and under no circumstances will such organs of tissues form a nidus for atmospheric matter or

generate a germ. Germs are not generated in living healthy organs or tissues.

I see no reason to doubt but that the germ theory has passed from a theory to a scientific fact, but I believe that the genesis of germs is, as I have explained, dependent as much on the nidus as upon the atmospheric matter; it is the two latent forces coming together that creates the germ, and upon the nidus depends the characteristics of the germ; moreover from the reasons already given I consider no germ nidus can exist in normal animal or vegetable matter.

Which of us have entered upon this world's stage of existence with normal organs and tissues and, if any, have we so lived in accord with nature's laws, as to maintain, cultivate and develop those organs? If there be any, then, of such I consider them proof against all germ diseases. These are they who live in plague-stricken cities without danger of disease.

To guard against epidemics by means of quarantine and cleanliness is perfectly in accord with nature's laws, and neither would require to be enforced if all persons were properly educated in these laws. But what use of such precaution, if, in our greed for riches, we, hour by hour, and day by day, exhaust our nerve forces by over-work and anxiety. Not entering upon the field of labor, as all men should, to be in accordance with nature's laws, to struggle for existence, but to struggle for riches, affluence and power, and for the gratification of our abnormal selfish desires. Under such pressure it is no wonder that our vital or nervous system, breaks down, and we become fitted to be the victims to the first epidemic, to the first materies morbis that enters our system, either by means of digestive or respiratory organs.

Will quarantine and cleanliness alone save the worn-out and exhausted laborer, servant, tradesman, merchant, or professional man, all of whom are slaves to labor, and taking but little rest to recuperate their lost physical forces. Will it save the over-worked teacher and school children who are starving for air and exercise? What will it do for those whose very pleasures are of most exhausting nature, robbing themselves of the proper time to recuperate their lost forces, rushing half mad through the ball room when they should be enjoying "Tired nature's sweet restorer, balmy sleep—" these poor slaves of a false social system who have not the moral courage to live in accordance with nature's laws? And what will it do for the unfortunate inebriate?

I say quarantine and cleanliness alone will not save these people. Nature tired of their unreasonableness, will do in the future as she has done in the past, slay these people with her epidemics; she will not be mocked, the people must choose between nature's laws or sickness and death, or, worse still, folly and crime.

Within the past year there has been very much writing and great discussions on the subject of cholera, but, like all other medical subjects, with very few exceptions, it appears to me that medical men on these subjects, base all their reasoning upon false premises; the old empirical school seems to me to have the same sway now that it had half a century ago, when I first entered the profession, and it rather surprises me to see so very few of the young men of the present day, that make medical philosophy the basis of their medical reasoning; however, I suppose there are none now but admit that there is a cholera germ, a tonic germ, that may be generated in the manner I have explained, in certain animal organs or tissues, which, when generated, becomes a materies morbis, that may be taken into the system either by the respiratory or digestive organs. But what has never been proven, at least to my satisfaction is, as to the locality or tissues that forms the nidus for the atmospheric matter, which, with the nidus, produces the germ; or, the germ already existing, where becomes its nidus after it has been received into the system. There is no secret about the nidus of the germ of typhoid fever; not so with the nidus of the cholera germ: because of the diarrhœa, it has been assumed that it is in the alimentary canal, but do the symptoms justify such a conclusion? I know of no dying where the symptoms so much resemble the dying from cholera as those presented by a person dying from the loss of blood, there is the greatest analogy in both cases, and why but that in reality the person dying from cholera does die from loss of blood,—that is to say, the whole serum of the blood is poured out through the coats of the arteries, and ejected by means of the viscera, leaving only in the vessels the red globules, which being deprived of the serum, soon coagulates, arresting the heart's action and resulting in death.

Now what must have taken place before the serum of the blood is separated from its red globules, evidently it must be preceded by par-

alysis of the vaso-motor nerves, causing paralysis of the vascular muscular fibres, particularly of the constricting fibres; then the vessels becoming relaxed the serum of the blood, being the most fluid, is poured out, while the red globules coagulate. So it appears to me that the action of the toxic germ of cholera is to cause paralysis of the vaso-motor nerves, and all the other symptoms of cholera are the result of that cause. Now all this does not prove that the nidus of the cholera germ may not be in some part of the alimentary canal, and the vaso-moter nerves be paralysed from the poison from that source, but I think it more probable, although I have no positive proof to offer, that the nidus be in some part of the great vaso-moter centre, the great sympathetic nerve or its ganglions. This is a question, however, that must for the present lie in abeyance, my object is to try and establish as a fact that the action of the toxic germ of cholera is to produce paralysis of the vaso-motor nerves, and, consequently, that the treatment must tend towards restoring those nerves to their normal states.

Dropsy, from heart disease, seems to me to bear some analogy to cholera: it is caused by serum being poured out, as in cholera, from the blood vessels, and in its last stage death is generally preceded by serous diarrhœa. May it not be probable that here also we have paralysis of the vaso-motor nerves, and, as digitalis has proved such a potent remedy in dropsy, might it not prove equally efficacious in cholera. Dr. Stewart, in his very scientific lecture on digitalis points out its valuable therapeutical effects upon dropsical effusion and in arresting serous diarrhœa, I presume by giving tone to the vaso-motor nerves. He says: "The action of the digitalis on the circulation in full medicinal doses may be summarized as follows:—

1. It makes the ventricles beat more powerfully.
2. It makes them beat slower.
3. It contracts the arterioles.
4. It raises the blood pressure."

Here we have physical phenomena produced by digitalis, the very opposite or antagonistic to the phenomena produced by the toxic germ of cholera, therefore it should be a remedy for that disease. But the question arises, would the digitalis produce these therapeutical effects where the case was cholera poisoning?

I don't know! From the well known action of ergot upon the vaso-motor centres and their pirepheræ. we would naturally look to it as a remedial agent in cholera, and electro-therapeutic treatment in the hands of an experienced electrician appears to me worthy of consideration. In fact any treatment that would be likely to restore the paralysed vaso-motor nerves to their pristine state of constricting vaso-muscular fibres should prove the best remedy for the treatment of cholera.

My chief object in bringing this short paper before the Society, was as an effort to stimulate discussions on medical subjects, from a physical stand-point. Medical empiricism has had a long reign, it must now give way to medical philosophy, the basis of which is physical science, or experimental philosophy.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Feb 6th, 1885.

T. G. Roddick, M.D., President, in the Chair.

Sarcomatous Disease of the Femur and Acetabulum.—Dr. Roddick exhibited the specimen and related the case. The patient, a young man, sprained his hip five years ago by falling through a trap in a hayloft. He appeared to recover completely, but in a few months became lame, and had pain, at times getting better. A year ago he had to take to crutches. Last June Dr. R. found roughness of the bones of the joint, and indistinct fluctuation in Scarpa's space. Nothing was done at that time. He was sent to the country, where he remained for two months, returning to hospital last October. The abscess was now opened.

He had hectic fever and lost flesh. He went away, but returned again in January, with suppuration about the joint. Becoming worse, it was decided to amputate at the hip-joint, which was done. There was no hemorrhage of any consequence, but the patient never rallied, and died twelve hours later.

Dr. Sutherland exhibited the following specimens:—

1 *A Gall-bladder containing thirty-two stones.*

This was removed from a subject (female) in the dissecting-room of Mc Gill College. Three or four of the stones were very large, measuring an inch square.

2. *Bladder and Kidneys of a man* from whom,

two months previous to death, Dr. Roddick had removed a vesical polypus by median cystotomy.

The bladder was much dilated and extensively hypertrophied. The ureters also were seen to be dilated. The kidneys were in a state of suppurative interstitial nephritis, or typical surgical kidneys.

3. *Malignant Disease of the Stomach, showing obstruction at the pyloric orifice.* A portion of the liver, the gall-bladder, ducts, duodenum and pancreas were also shown. Secondary deposits were seen in the latter and in the glands. The bile ducts were pervious. At the autopsy the following was noted: Emaciation and jaundice; 160 ounces of bile-stained fluid was removed.

The liver appeared small and the stomach very large, extending seven inches below the ensiform cartilage. On raising the left lobe of the liver, a large hard mass was felt, which involved the pylorus and apparently part of the duodenum. On slitting up the stomach after its removal, the mucous membrane was seen to be pale and anæmic. At the pylorus was a thick ulcerated ring, studded with little red granular ulcerations, and occluding the entrance into the duodenum, preventing the passage of the little finger. A mass about the size of an egg was situated in the pancreas, near its head—probably a secondary deposit, as it was not actually ulcerating. Jaundice was produced by small masses in the gastro-hepatic omentum pressing on the hepatic duct.

Dr. Geo. Ross said there were several points of interest in the clinical history of this case. The gentleman came to him a year ago complaining of dyspepsia; his general health was not good; he said he had been failing. Improvement followed upon treatment. He saw him again in the spring, when he complained of vomiting at intervals of some length. There was no pain after meals, or ever. At intervals of one, two or three days he would have heartburn and an uneasy feeling; he then would get over a basin and empty his stomach. He would have no nausea, or pain, or retching. On examination, the stomach was found dilated, extending below the umbilicus. Its movements were plainly visible, and splashings could be heard. The patient was anæmic, and becoming thinner. Malignant disease of the pylorus, with dilated stomach, was diagnosed. No tumor could be felt. He was advised to enter hospital in order to have the stomach regularly washed out. Coming to hospital some weeks later, no dilatation of the stomach could be made out; it was not subsequently present. He had occasional vomiting of frothy material containing *sarcinæ ventriculi*. He became more comfortable under treatment, though he lost flesh. There was never any pain. He remained in hospital about a month. After this he gradually became jaundiced, and continued to lose weight. At no time were there symptoms of gastric trouble, except the occasional vomiting. There never had been any hæmorrhage. A short time before death, an indistinct fulness could be made out at the pyloric end of the stomach. It proved to be scirrhus, as was shown by slides exhibited under the microscope by Dr. Johnston. Dr. Ross said the pylorus would not admit the little finger, and why there was a dilated stomach at first, and not later, was not easy to explain.

Dr. Kennedy said that perhaps the circular muscles at the pylorus, from irritation, were spasmodically contracted, but when the disease advanced they might have been destroyed, and so relieved the spasmodic closure of the orifice.

Dr. Robt. Bell (Ottawa) then read a paper by Dr. Percy W. Mathews, on "*Notes on the Diseases among the Indians of York Factory, Hudson's Bay.*"

Dr. O. C. Edwards, late secretary of this Society, and now in medical charge of Treaty No. 4 Indians, Indian Head, North-West Territory, being present, made a few remarks on some of the diseases among the five thousand Indians on his reserve. Syphilis was very prevalent, and one of the most powerful agents in weakening the Indians. Years ago they led a wandering life, had plenty of food, and were well housed in huts made of buffalo hide. Now, having entered into treaty, they are placed on reserves, making themselves practically prisoners of war. Coming in contact with the whites, they have become infected with syphilis, and as they very seldom apply for treatment, it has spread. The Indians attribute their present condition to the extermination of the buffalo. The Government has tried to make them agriculturists, with but very little success. Phthisis is a most fatal disease, and is usually accompanied with hemorrhages. They apply for assistance, but it is almost impossible to help them, owing to their being badly housed, and they will mix what one gives with their own medicines. Along with this is the noisy "tom-tom" constantly going on outside of any sick man's house

or tent. Prolonged lactation is common. A squaw often nurses her child till it is three or four years old. An Indian has as many wives as he can keep, often five or six. They appear to be exempt from toothache. They are great tea drinkers, and often mix tobacco with the tea. They smoke a great part of their time, swallowing the smoke, which they let out again by the nostrils. They never have inflammatory rheumatism. He has onl. seen one case of epilepsy, and that was a half breed. Measles comes as an epidemic, and is almost as bad as smallpox. For snow blindness they apply tea leaves. In the month of March, one must protect their eyes against this. Dr Edwards said that prior to meeting with the whites they were very moral and honest ; now they don't know what these virtues are. He has visited Indians who still live by hunting, and far away whom he found honest and moral.

Dr. Hy. Howard remark that Butler, in his "Great Lone Land," said there was no such thing as impurity or dishonesty when he travelled among them.

Dr. Robt. Bell's experience was that the civilized are immoral. Squaws think they are benefiting their race by having a child to a white man. Labor is effected while on the knees, and is of short duration. He knew of one squaw who was drawing a load of wood, and who, after a halt of half-an-hour to have her baby, proceeded on with her load. Menstruation comes on when about 12 or 13 years old. They are not very regular, often skipping three or four months, caused by hard ships and bad food. As a rule, they lose very little.

Dr. Proudfoot said he had been a good dea among the Indians up by Lake Huron, and found phthisis to be very fatal with them.

Dr. F. W. Campbell had noticed that phthisis had killed a good many of the Micmac Indians of the Bay of Chaleurs.

Dr. Trenholme said he knew of a French Canadian woman in Montreal who was a grand mother at 25 years of age.

Stated Meeting, Feb. 20th, 1885.

T. G. Roddick, M.D., President, in the Chair.

Abnormal Muscular Slip.—Dr. Trenholme exhibited a man, aged 45, having an elevated congested-looking mark about 15 inches long, running obliquely from under the clavicle to the ensiform cartilage.

Dr. Shepherd believed it to be an abnormala muscular slip from the external oblique muscle to the pectoral.

Ulcer of the Stomach ; adhesion to the liver : abscess between.—Dr. Bell exhibited the specimen, and Dr. Roddick related the following history of the case : Mrs. J. sent for him three years ago for a profuse hemorrhage from the stomach. Ulcer was then diagnosed. One year later she had a second bad hemorrhage. A few months after recovery from this last attack she broke her radius, which united well. After a time she failed in health, became blanched, and felt as if she lost blood, though no more ever came by the mouth. On being sent for again, Dr. R. P. Howard was asked to see her in consultation. At this examination, they found the stomach dilated. Dr. Howard concurred in the diagnosis of ulcer of the stomach. The patient would eat, and, after a day or two, would vomit apparently all the food taken the couple of days previous. Washing out the stomach was suggested, and the case was handed over to Dr. Bell to carry this treatment out. Dr. Bell said that for a time his patient stood the treatment, but afterwards she declined to have anything further done. She only lived six weeks longer. He got permission from her friends to allow him to go to the vault and open her to examine the stomach. On the posterior wall of the stomach, midway between the œsophageal and pyloric openings, is an old ulcer ; at this point the stomach is also adherent to the liver, and between the two is a sac containing pus, with an opening into the stomach.

In answers to questions, Dr. Roddick said the stools never showed signs of blood. He fed her at one time for a month per rectum on peptonized foods.

The Single Suture.—Dr. Alloway gave the following particulars :—Of the last thirty cases of parturition I have attended in primiparæ, eight have suffered from laceration of the perineal body sufficiently extensive to warrant the application of the *single suture*. In one of these cases, the suture was not applied until six hours had elapsed since the delivery. Union in all of these cases has been complete and permanent. In all of them I have employed the most perfect antiseptic course of post partum treatment, to which I attribute a large share

of the success in obtaining primary union. The application of the suture was suggested and practised by me two years ago for the first time. In the *American Obstetrical Journal* of February, 1884, I have given a detailed description of the operation, a short epitome of which is all that is necessary here. A straight perineal needle three inches long should be used. I have had these needles for this operation made by Messrs. Codman & Shurtliff of Boston, and they can be obtained at Messrs. Lyman & Sons, Montreal. No other needle can be used with the same satisfaction. I use, absolutely, Snowdon's iron-dyed silk, No. 13. A strong needle holder completes the outfit necessary. During the examination of the wound, sponge it well of all blood clots with a solution o bichloride. Then pass the needle through the skin about half an inch from the edge, and at a level with the very beginning of the tear. With two fingers of left hand in the rectum, force up the recto vaginal cellular tissue and make the needle glide rapidly, though steadily, beneath this cellular tissue, as close to the wall of the rectum as possible to make its exit at a corresponding point on the opposite side of the tear. Now sponge the wound carefully again, and bring the edges of the wound together by tying the suture fairly tight. It will be noticed now that there wil be some bulging or gaping of the part of the wound between the suture and sphincter ani, and will be very tempting to apply another superficia suture; but my advice is—*don't*, it will be frustrating the very object of the operation,—avoid all *unnecessary* sutures as you would other foreign bodies between the edges of the affixed surfaces. This gaping fissure will shrink away by the third day, and the two edges will come together in close union. I will now speak of one or two cardinal points which are *absolutely* necessary in doing this operation. First, be sure that the needle, in no part of its course, appears in the vaginal wound. The corners of the laceration at the entrance and exit of the needle, where the wound is sometimes deeply fissured and jagged, require especial care on this point. To guard against this, the thumb of the left hand should be kept always in the wound over the course of the needle, constantly feeling for it; and should you detect the needle in the surface of the wound in ever so small a part of its course, it should be withdrawn and deeper tissue taken up. After the needle has made its exit on the right side, it should not be completely drawn through until the operator has again examined its track and become satisfied that the suture will be completely buried in all its course. If this care is not specially taken, and a part of the suture should gain entrance to the wound, a pus pocket will be very likely to form, and the operation will fail. A suture passing through the cavity of a wound is a foreign body, but passing around outside of the wound, it cannot interfere with union. The certainty of success of this operation hinges largely on this simple fact, and it should be well borne in mind. The suture is removed on the eighth day by dividing it with a scissors, and it will be found to give a loop of about three-quarters to one inch in length if the divided ends are reunited. The second point of importance lies in the after-antiseptic treatment; and I will certainly not hold the principle of the operation responsible for failure unless this point is carried out as advised. I hold this position on the same grounds as a surgeon of the present day who would not feel inclined to hold himself responsible for the successful issue of an amputation or severe lacerated wound, the after-treatment of which had been taken ont of his hands and handed over to the tender mercies of an ignorant nurse and a few well-economized soiled rags. I cannot conceive why there is so much opposition to the dressing of puerperal wounds.

The main part of the post-partem antiseptic treatment consists in irrigating the wounded passage with a $\frac{1}{5000}$ mercuric solution *once* daily. The first irrigation is performed the day following the delivery, and again at each morning visit until the eighth day, when the suture is removed and union found complete. In carrying out this procedure the patient is gently lifted, while lying on her left side, to the edge of the bed, the nates hanging just over the bedboard. A small rubber apron (a quarter of a yard square) is slipped under the hips and tied over the crest of the ilium. In this way a gutter is formed which carries the fluid as it runs from the vaginal passage into a receiving basin on the floor. The reservoir of the irrigator is then filled with the mercuric solution previously prepared. The nurse holds the reservoir in her hand at the proper level, and the physician introduces the glass tube into the vagina after he has first allowed some fluid to run into the basin to drive out the air. As soon as the nurse notices that the fluid has become exhausted to about an inch from the bottom of the reservoir, she informs the physician, and he

withdraws the glass tube from the vagina and allows the remaining fluid to run on and cleanse the external parts. A napkin is then applied, and the patient gently lifted back in the bed and allowed to remain on her back for a short time. I never allow the nurse to touch the parts under any pretence whatever. Her duty consists in giving the patient her prescribed diet and attending to the infant. A saline is administered every morning, and the bowels gently moved over a bed-pan adjusted by the patient herself.

I will now illustrate by these diagrams on the board that directly after a bad laceration takes place, and before the suture is passed, the vaginal passage is much elongated and the uterus slightly anteflexed. The uterus can now hardly be reached by the fingers without introducing the whole hand. We will now pass the sutures and draw somewhat upon the posterior wall, through which it passes, and you will find that the vagina shortens, the uterus comes nearer to the introitus, and, as the cervix is drawn slightly forward, the fundus leans backwards Draw the suture still more, and fix it with a firm knot, and on now passing your index finger you will easily meet the cervix at its tip, and the fundus will have been thrown still a little further backward into what we would call a normal position. This series of facts I have demonstrated to myself on the living subject, and it serves to establish the ease with which a uterus may become prolapsed and afterwards retroverted, as it sinks in the pelvis where the perineum and vaginal wall have not been repaired, and the patient soon assumes the erect posture. I will now, by this wooden model, show how the suture is passed, and illustrate that it thoroughly controls the muscles in the perineum (the transversus perinei, bulbo-cavernosus, etc.), which exert any traction power on the laceration. This is independent altogether of the fact that, as the child becomes evolved, dilatation is so extreme that there is such calibre to spare between this extreme dilatation and complete involution that there can be practically no side traction upon the wound till the eighth or tenth day, when union will have become fairly strong. So that, really, all we want are two fixed points—one at each extremity of the wound—and that the cavity of the wound be cut completely off from the vagina (the drain-pipe to the uterus). Draw the suture tight and tie the vent, pass your forefinger down along the posterior wall of the vagina, and you will find no wound, not even a fissure. The whole laceration is compressed like the mouth of a bag by a running string. The wound below is a *cul-de sac*. The sides are in perfect contact, and as no discharges from the vagina can possibly enter it, primary union must ensue.

Dr. KENNEDY said slight tears were very common, and seldom could be avoided. These tears appear more at the time, and almost always do well without interference. In an instrumental case, there is much less danger of a bad tear if the forceps be removed when the head is well down against the perineum, allowing the natural efforts to complete delivery. He advocated stitching if there be much of a tear. Unless there were special danger of septic poisoning, he would not use injections.

Dr. BLACKADER dissented from Dr. Kennedy in leaving even a very moderate tear alone. He always mends such a rent for two reasons. It lessens the chance to prolapse, and it closes an open wound, thereby guarding against septic infection. Heretofore he has put in two or three stitches; lately he has tried the single stitch, as employed by Dr. Alloway, and with good results.

Dr. TRENHOLME believed a common darning needle would answer in this operation. He said that after a day or so the stitch got loose from the tissues being swollen when applied; to obviate this, Dr. Carson of Detroit employed the shotted suture—that is, a wire suture held on each side of the rent by a small bullet which could be pushed up the wire when it became loose. He (Dr. T.) uses the catgut sutures, and gets perfect satisfaction. He thought Dr. Alloway's purse-string suture would shorten the posterior wall of the vagina, and so favor prolapse and retroversion.

Dr. RODDICK said that Dr. Alloway's operation had this in its favor—it was easily done. He believed it to be an admirable method.

Dr. GARDNER had not yet tried the single stitch. He employs two or three stitches of silk. He intended trying the single ligature.

Dr. ALLOWAY, in reply, said that Dr. Kennedy's cases, where left alone, had to heal by granulation and not by first intention, as is the case when stitched properly. In reply to Dr. Trenholme he said that a common darning needle would be very apt to break in the forceps. As to Dr. Carson's shotted suture, he thought it very objectionable to

be interfering with the wound every day. Cat^{gut} sutures are difficult to tie, and they may become absorbed too soon.

Dr. KENNEDY asked what length of tear Dr. Alloway would consider necessary to stitch.

Dr. ALLOWAY said anything over a quarter of an inch.

Stated Meeting, March 6th, 1885.

T. G. RODDICK, M.D., President, in the Chair.

Congenital Looseness of all the Joints.—The PRESIDENT exhibited a girl aged 4 years present ing this condition, and allowing of the production of partial dislocation of all the larger joints. Talipes of the feet could also be simulated.

Decidual Cast of the Uterus.—Dr. ALLOWAY exhibited a very perfect decidual cast of the uterus at the end of the sixth week of gestation.

Neuroma.—The PRESIDENT shewed a neuroma dissected from an amputated stump.

Dr. HINGSTON said he believed that the bulb, ous end of a nerve was a frequent cause of pain in the stump, and related a case in illustration.

Dr GEO. ROSS read a paper on a *Case of Pulsating Empyema.*

Dr. HINGSTON said that when a student, in 1851 at the General Hospital, he saw a case of pulsating empyema, accompanied with metallic tinkling synchronous with the pulse, and evident at the surface of the back. The late Dr. Holmes, then clinical teacher, said at the time that it was the first case of the kind he had ever seen.

Dr. GEO. ROSS did not see how you could possibly have pulsation communicated through the fluid in a case of pyo-pneumothorax. The physical conditions which would cause amphoric phenomena would prevent pulsation being observed. To observe the latter the sac must contain fluid alone.

Cases in Practice.—Dr. SHEPHERD related the peculiar abnormalities seen by him lately in a healthy young man, age 22, who has transposition of the viscera of the chest and abdomen the right testicle hangs lower than the left.

Stated Meeting March 20th, 1885.

T. G. RODDICK, M.D., President, in the Chair.

Dr. A. L. SMITH shewed the following cases of skin diseases: 1st, *Tinea Tonsurans* in a state of kerion, the ulcerating patch being about 3½ inches in diameter. 2nd, *Specific Lupus of the Face*; the patient, a woman, was doing well under applications of acid nitrate of mercury. 3rd, *Specific Ulceration* on the leg of the last patient's husband. 4th, *Tinea Versicolor* over the chest of a delicate young woman.

Case of Abdominal Section.—Dr. TRENHOLME, who performed the operation, said this case was of some interest, inasmuch as a definite diagnosis was not only impossible before the operation, but the portions of the tumor removed, and now before the Society, have not yet been definitely determined as to whether they are the remnants of an extra-uterine fœtation or of a dermoid cyst. A report upon their character will be brought before the Society at a subsequent meeting. The following are brief notes of the case:—

The patient, Mrs. O., of Ontario, a well-developed, fleshy woman, 46 years old, was married 31 years; no children. One abortion 25 years ago. For nine years after abortion suffered at menstruation. Twelve years ago had inflammation of the bowels. Ten years ago had another attack of a similar character. After this, enjoyed fair health till change of life occurred, seven years ago. Since this last period, was pretty well up to October last, when she had what was supposed to be inflammation of the bowels. Her health from this time onward not good, when, about the beginning of the present year, she was again taken ill with very severe inflammation of bowels, though, she said the disease seemed lower down in her body, accompanied with a good deal of irritation of the bladder and decrease of quantity of urine. Menstruation returned again last fall, but was scanty and at irregular intervals also, frequently accompanied by severe pains. *Present state.*—Debilitated appearance, pasty color; irritable stomach; scanty urine (2 or 3 ozs.), high-colored, no albumen; bowels regular; pulse weak (shabby) and rapid. Tumor felt over hypogastrium; per vaginam, tumor over brim of plevis, larger than a fœtal head. Uterus 2½ in., and carried upward and backward. Tumor and uterus found closely united, but thought moveable. Diagnosis, fibro-cystic tumor of uterus most favored, but held to possibility of tumor being ovarian. *Operation.*—Assisted by Drs. Hingston, Kennedy, Perrigo, and Armstrong, made usual exploratory incision, and found no walls to cyst. Removed three gals, of fluid, and then found the debris of a dead fœtus, which, with the placental debris, was scooped out with the hand. No ligatures were required to arrest bleeding, which was very slight. Abdomi-

nal cavity was well cleaned and washed out. Uterus and ovaries were normal. *Result.*—Patient never overcame the shock, and died twenty two hours after operation. No post-mortem was permitted.

In reply to questions, Dr. TRENHOLME said the woman's history did not indicate pregnancy, and that before operating her temperature was normal.

Several members who examined the debris gave it as their opinion that there were no fœtal structures present. The bony piece was thought to be part of an ossified cyst wall. There was no sign of any of the long bones.

Sarcoma of the Testis.—The PRESIDENT exhibited the specimen and related the following history of the case: Patient, aged 48, had an attack of orchitis first in September, 1883; no cause could be assigned for this. He rode much on horseback in the woods, but there was no history of injury. In July, '84, he had another attack of inflammation in that testicle, which did not reduce in size. Last October it became very bulky. There was no disease in the cord. He was anæmic. No history of syphilis. Had had gonorrhœa ten years ago. Iodide of potassium and mercury was given for a month. After this, Dr. Bell attended him through an attack of phlebitis of the left leg. Sarcoma of the right testicle was diagnosed. Dr. RODDICK removed it, and a microscopic examination revealed it to be of the large round-celled variety of sarcoma. The tumor was as large as the fist. Slides prepared by Dr. Wilkins were shown under the microscope.

Large Intra-uterine Myoma.—Dr. Wm. GARDNER exhibited the specimen and related the case.

Patient, aged 42, very pale, came to him with a history of severe hemorrhages for the past two or three years. No pain. An examination caused a great hemorrhage. The tumor could easily be felt in the hypogastrium, and by the vagina, in the uterus. After dilating well with tents, it was removed in pieces by means of the spoon saw. The operation lasted an hour and a half.

Not more than five or six ounces of blood was lost. A good many shreds came away after.

The uterus was thoroughly irrigated and drained with the double tubes. These were sutured to the lips so as to keep them in place. After eight days they ulcerated away, and were allowed to remain out for 24 hours, when the temperature rose to 101½°. The os was then opened, and three or four ounces of bloody fluid escaped.

The tubes were again used as before. The patient made a good recovery. Dr. Gardner said that the irrigation was troublesome, but on it rests the success of the operation. Lawson Tait has lost 50 per cent. of these cases.

Dr. TRENHOLME said he had removed several of these tumors and never lost a case.

Dr. SMITH asked if ergot had been given in this case for a long time as recommended.

Dr. GARDNER replied that the patient's history and blanched condition indicated immediate operation. Ergot could not be depended upon, and, besides, the woman was poor and could not afford to lie up.

The PRESIDENT thought the woman's condition justified operative interference.

Removal of a Uterine Myoma with the Cephalotribe.—Dr. HINGSTON said that two weeks ago a lady came to him from the country suffering greatly from a large uterine myoma, which did not cause hemorrhage. The tumor was about the size of an infant's head, and sessile. He had seen Sir James Simpson use the cephalotribe in a similar case, so thought he would try it here. One blade was easily entered, but much coaxing was required to get in the other. A good bite was secured, and the screw applied. In this way one-half came away. Again the blades were applied, and half the remainder came away. Now the uterus was drawn down and out, and the rest of the tumor shelled out with the fingers. Patient made a good recovery. Injections of Condy's fluid were used.

Dr. GARDNER said he believed the vulsellum and spoon were the best instruments to use in these cases.

Dr. TRENHOLME remarked that both in this case and Dr. Gardner's an incision through the mucous membrane covering the tumor might have been all that was needed, as this simple operation has at times relieved pain and arrested hemorrhage.

Dr. SHEPHERD read a paper on "*The Musculus Sternalis and its occurrence in Anencephalous Monsters.*" He stated that the musculous sternalis was a supernumerary muscle which has always excited a great deal of interest among anatomists, and that its proper morphological significance was not yet fully determined. It was seen in about three or four per cent. of ordinary individuals, and its fibres generally ran at right angles and super-

ficial to the great pectoral. It was often bilateral but most frequently unilateral, and was subject to many variations. Frequently it had no attachment to bone, but lay superficial to the great pectoral, and was attached at either end to fascia. It often was inserted into the costal cartilages.

It might be continuous above with the sternal origin of the sterno-mastoid, and below with the fascia of the external abdominal oblique. Again, it might be continuous with the pectoralis major, and be associated with deficiency of that muscle.

It was often of small size, but occasionally it was quite a strong muscle, and could be seen under the skin in the living. Dr. Sheppard had seen it measuring five inches long, two and a half inches broad, and two and a half inches thick. For years it was considered to be a remnant of the rectus abdominis, which in many animals extends from the pubis to the top of the sternum, and was called the *sternalis brutorum*. This view had long ago been given up because the rectus abdominis lies in a plane deeper than the great pectoral, and is never superficial to it. Bourienne many years ago held that it was a prolongation downwards of the sterno-mastoid, a view still held by Henle and others. Hallette and Wilde regarded it as belonging to the same group of muscles as the platysma, and Prof. Turner, of Edinburgh, considered it to be one of the representatives in man of the great panniculus group which exists in most mammals. Darwin also held this view in his work on the *Descent of Man*, after referring to the views of Prof. Halbertsma, M. Testut and Prof. Bardeleben.

Dr. Sheppard stated that Prof. Cunningham, of Dublin, has lately in five cases traced the nerve supply of the musculus sternalis to the anterior thoracic nerve, and that he, believing that the nerve supply was the best indication for the proper classification of muscles, considered that the musculus sternalis belonged to the pectoral group. Prof. Cunningham also suggested that this was a new inspiratory muscle appearing in man, and that it was his impression that it occurred more frequently in females, due possibly to costal inspiration being more pronounced in them. Mr. Abraham, of Dublin, first pointed out, last year, that this muscle was very common in anencephalous monsters, as he had found it in six out of eleven specimens examined. Mr. Abraham looked upon it as probably an aberrant portion of the great pectoral muscle.

Dr. Sheppard said that he had examined six anencephalous monsters which were in the museum of the Medical School of McGill University, and wished to place the results of his dissection before the Society. In each monster he had found a well-developed musculus sternalis. In three the muscle was double; in two continuous above with sterno-mastoid, and in several it arose from the manubrium sterni, and was inserted into the costal cartilages. In all the cases there was a deficiency of the great pectoral muscle on the side where the supernumerary muscle was found, the abnormal muscle apparently taking the place of the absent portion of the pectoral. In several the muscle was of large size, and in part continuous with the fibres of the great pectoral. Nine muscles, in all, were found in six monsters, as three had double muscles. Dr. Sheppard had successfully traced the nerve supply of these muscles in all but two—that is, seven of the muscles were supplied by the anterior thoracic nerve; the nerve entered the muscle in its deep surface and could be traced back over the lesser pectoral through the costo-coracoid membrane to the internal anterior thoracic nerve.

Dr. Sheppard remarked that it was a curious fact this muscle should be supplied by a nerve which is at so great a distance from it, and not by the intercostal nerve, which in several cases pierced the abnormal muscle without giving any branches to it. He also stated that he had formerly held that the *musculus sternalis* belonged to the panniculus group, but that these dissections had caused him to alter entirely his previous views as to its homology, and that now he had little doubt that this muscle belonged to the pectoral group because: 1. Its nerve supply. 2. When present the great pectoral is generally deficient. 3. Its continuity in many cases with the great pectoral. 4. That it was in the same muscular plane as the great pectoral. Dr. Sheppard said that it was his belief that the nerve supply was the best guide we possessed for determining the homology of a muscle.

Dr. Sheppard was unable to explain why this muscle should be so common in anencephalous monsters, except that in these undeveloped beings there was a greater tendency to revert to previous conditions; but he said it was difficult to reconcile the fact that this muscle was an aberrant portion of the great pectoral and a reversion to some pre-existing muscle, as no known existing arrangement

of the pectoral group in the lower animals at all resembles the condition found in these monsters. He also stated that if this muscle was an aberrant portion of the great pectoral which had no animal representative, then Prof. Cunningham's theory, that it was a new muscle appearing in man, had some degree of probability. Dr. Sheppard said he was not prepared to accept this explanation, but awaited further light and further knowledge of comparative anatomy before pronouncing definitely on the morphological significance of the musculus sternalis.

After the reading of the paper, the specimens were exhibited to the Society.

Dr. Henry Howard said that Dr. Sheppard's demonstration was a further proof that man evolved from a lower animal, and did away with the theory of the creation of man as he now is.

Stated Meeting, April 3rd, 1885.

Dr. Trenholme second vice-president in the chair.

Dr. Stewart exhibited the patient and read the following account of a case of Tabes Dorsalis with exaggerated patellar reflex.

The patient (a man) who is forty-two years of age, complains of dimness of vision, flatulency, and of shooting pains in various parts of his body. He dates his troubles to a "cold" which he contracted three years ago. Among the first symptoms he noticed were the darting pains which have troubled him with more or less severity ever since. Two and one-half years ago he suddenly became aware that he saw objects double, and on shutting his right eye he was surprised to find that the vision of his left was markedly diminished. This diminution in the vision of the left eye steadily progressed until a few months ago, since which it has remained stationary. During the past five or six months there has been a steady and progressive diminution in the vision of his right also.

He injured his back a few years ago, but neither at the time nor afterwards does it appear that he suffered in any particular way from this injury. In 1875 he had two sores on his penis, but there is no positive evidence whatever that those sores were of an infecting character; otherwise his past history was unimportant. There is nothing of importance to be derived from the family history.

His present condition is as follows: There is no paralysis or atrophy of any of the voluntary muscles, their mechanical, faradic and galvanic irritability are normal. All the superficial reflexes are more or less exaggerated with the exception of the plantar. The cremasteric reflex is especially exaggerated. The patellar reflexes are exaggerated' as are also the triceps reflexes, but only to a slight extent compared with the patellar.

The organic functions of defecation and micturition are considerably interfered with, while the swallowing reflex is normal.

Shortly after urinating he is able by "pressing hard," to pass a number of ounces of urine. That the sphincter of the bladder suffers as well as the detrusor is shown by the fact that when the desire to urinate comes on, unless he is ready, the urine floats away in spite of all his voluntary efforts to retain it. Although not troubled with constipation, he has difficulty in expelling the contents of the rectum.

The "shooting pains" which trouble him are, for the most part, situated in the lower extremities. Sometimes, however, they have their seat in the hands, arms, trunk, face, neck, and even the ears. He has no delayed sensations, but he frequently experiences a sensation as if some one was pinching him or pulling from within outwards, a pain through his skin. There is no incoordination or disturbance of the muscular sense.

Dr. Buller's report of the condition of the eyes: "Argel Robertson pupil. There is very considerable atrophy of both optic nerves, with great limitation of the visual fields, especially of the left. The nerves are pale and of a blue gray colour. The blood vessels are very small. There is no evidence of a previous inflammatory condition." The functions of the remaining cranial nerves are normal.

Dr. Stewart remarked that there was no doubt that the man was suffering from tabes dorsalis, despite the fact of the marked exaggeration of the patellar reflexes. There were present two of the three characteristic symptoms of this disease —the lightening pains and the reflex immobility. In addition there was the optic nerve atrophy, the temporary diplopia, together with the bladder and rectal symptoms, forming a combination of symptoms that, at least up to the present, have only been described under the head of that myriad-sided disease, tabes dorsalis.

Absence of the patellar reflex, Dr. Stewart remarked, is looked upon as one of the most important and earlier symptoms of the disease. A few cases have been recorded where it has not been absent, but up to the present time he had not read of any case where it was exaggerated. On theoretical grounds it had been suspected that preceeding the stage of loss of patellar reflex in tabes, there is a period when it is exaggerated. Even were this supposition true, it would not aid us any in this case, for it is one of considerable standing, although still in the pre-ataxic stage.

The increased inflexes cannot be explained by disease of the lateral column, for there is an entire absence of any increased turicity, this symptom being next to the exaggerated reflexes the most trustworthy evidence of a sclerosing of the pyramidal strands.

Dr. Stewart concluded by stating that the honour of having made the diagnosis was Dr. Buller's, and it was owing to Dr. Buller's kindness that he was enabled to present him to the Society.

Dr. Hy. Howard said that the expectation of mental symptoms depended on whether the lesion begins, high or low in the cerebro-spinal system for in ascending lesion death takes place before any dementia occurs.

Hence the important point is to know what centres are affected, and whether these be above or below the reflex centres usually implicated in Tabes.

Here it is interesting that the cortical substance having been involved some years, there is yet no impairment of mental powers.

Dr. Campbell said that owing to the better knowledge in general, and especially of opathalmoscopic signs, cases of this disease were now detected, which formerly escaped diagnosis; but he did not believe such cases occurred with greater frequency to-day. He spoke of a case (which had been seen in consultation) by Dr. Trenholme in which a woman evidenced exaggerated sexual desire; subsequently become insane.

In answer to Dr. Trenholme, Dr. Stewart said, death was often due to exhaustion from the pains,

Dr. H. Howard said that Pneumonia was sometimes a cause of death due to implication of pulmonary trophic centres and respiratory tract.

In answer to questions as to treatment, Dr. Stewart said that though there was little evidence of syphlis, he had put his patient on anti-syphilitic treatment. Electricity is useful to control the pains.

The flatulence was thought part of the disease due to paresis of intestinal muscleis.

Some discussion as to use of ergot in Tabes followed and Sequin and Althans were quoted in support of its use. Dr. Stewart said that it was perhaps dangerous as Ergotism caused an apparently genuine Tabes.

In reply to questions as to Etiology, Dr. Stewart said symptoms (especially eye symptoms) no doubt preceded injury and beat referred to.

Dr. Reed called attention to disturbances in function of urination as early symptoms in Tabes.

Dr. Reed, spoke of 2nd attacks of measles in same patient, and spoke of two such recently observed by him.

Dr. Campbell said, he had seen at least six such cases; and much more extraordinary, had seen scarlet fever recur within a few weeks of first attack. He also spoke of the severity of the complications in the present epedimic of Measles as Pneumonia, Pleurisy, etc.

Dr. Kennedy followed to same effect and cited a case where scarlet fever measles and whooping cough were interchanged among the children of one family. Dr. Kennedy also spoke of a case where he diagnosed measles 10 days before the development of rash owing to catarrnal symptoms and a prodominal rash

Dr. Campbell spoke of hooping-cough frequently following measles in this epidemic. He advised treatment with quinine with cures *in every case* within five or six weeks. He said the theory was that the spores deposited on faucas kept up irritation, and the quinine by causing profuse secretion led to these germs being washed away. This being theory, the practical point is that the treatment by quinine is very successful.

Dr. Reed said that Henock found that "the measles usually followed hooping-cough; and that quinine had failed in his hands; he finding morphia most efficient."

Dr. Trenholme said that in his hands Drosera Rotundifolia (Parke D. Extr., and Eucolyptus had done good service in Hooping cough.

Stated Meeting April 17, 1885.

Second Vice-President, Dr. Trenholme in the chair.

Tubercular Lung with Pleura from a case of Hydropneumothorax.

Dr. R. J. B. Howard exhibited the specimen and said that on opening the thorax the right lung was emphysematous and contained many gray granulations about the anterior part of middle lobe. Left pleural cavity contained a blood clot measuring 17 oz. vol.: on removing this the pleural sac was everywhere lined by firm buff-colored membrane nearly ¼ thick. The pulmonary portion was equally thick, and binds the lung firmly down to the vertebral column. A small opening communicates with a cavity in lung: this opening being situated high up behind. So firmly attached was the lung that it had to be cut out: in doing this the cavity was opened. It occupied the whole upper lobe and would have held a hen's egg. Its walls were lined in the upper part by a smooth gray membrane, but the larger part of the walls were ragged and crossed in all directions by strands of tissue, in many cases consisting only of one or two vessels of considerable size. The cavity contained a good-sized clot. No open vessel was found. The lower lobe contained many *caseous* nodules.

Evidently the cause of death was hemorrhage from the pulmonary cavity into the pleural space in fact internal hemorrhage—a very unusual termination. The patient has had pneumothorax for months, and his chest was opened and drained about two weeks before. There was more fear that the operation might have caused or at least accelerated death: but I could find nothing to lend color to this view—in fact the obliteration of the pleural cavity from the bottom was commencing.

Dr. Geo. Ross said he had first seen this patient about eighteen months ago, but that he had been in the hospital previously for months with phthisis and softening of the left apex. The day before seeing him he had been seized with severe pain in the left side accompanied with shortness of breath and distress. This continued for 24 hours. On examining, *pneumo-thorax* was found, therof was no fluid. The left chest was distended with air, the heart pushed over, pulse rapid, and he was cyanotic. After a time fluid gradually replaces he air till the left side was full. He was then tapped of serous flud, giving great relief and feeling much better. Went home, when he improved and gained weight. He came to the Hospital once a month to be examined.

After some months the chest again refilled and he became feverish. He was again tapped, a serо-purulent fluid coming away. The fluid rapidly re-collected accompanied with fever and emaciation. An incision between the ribs was made by Dr. Roddick and a drainage tube put in. The fever lessened though some remained. Pulse was still rapid. He was improving, till one day he suddenly became pale and exhausted and blood leaked out by the tube.

But for this accidental ulceration of the vessel in the lung he thought this patient might have recovered. A similar case had been treated by Dr. Wilkins and himself ten years ago, who recovered and is now alive.

Dr. Kennedy said that this case recalled one he had seen years ago, that of a man who died from fracture of the skull. At the *post mortem* the right lung was found collapsed and in a fibroid condition the side of chest sunken in and the viscera had adapted themselves to the altered shape of the chest. The organs appeared healthy and the man would have lived years but for this accident. He had been operated on for hydro-pneumo-thorax two years previously.

Dr. Godfrey said he had seen a similar case where a woman died seven years after from tuberculosis of the opposite lung.

Stated Meeting April 31, 1885.

Dr. Trenholme in the chair.

Pieces of necrosed Bone from an Abscess at side of Potts Curvature.

Dr. Shepherd exhibited 8 small bits of bone removed by him from an abscess at the side of the spine. A second abscess was on the side—both following inflammation produced by a kick over the part.

Dr. Armstrong then read a paper on Antiseptic Midwifery (Published in May No. of Record.)

Dr. Kennedy said he did not believe in treating a natural process as if it were pathological—He spoke against the use of the spray, etc., in labour, and thought that antiseptic injections were very seldom needed. The giving of these injections, by the physician was lowering him to the position of nurse. He had read of poisoning following the use of injections of solution of bichloride of mercury.

Dr. Campbell endorsed Dr. Kennedy's views. During his 23 years of practice he had attended 1700 cases of midwifery, and only had six cases of

septic trouble, using only ordinary precautions. Most of the cases of septic poisoning were among the better classes.

Dr. A. A. BROWNE said he had never seen antiseptic midwifery carried out. He thought the main things to attend to were cleanliness and having fresh air. In the Vienna Hospitals the fresh air was heated before going through the wards.

Dr. SHEPHERD said that of late years the term antiseptic treatment had a wider meaning than Listerism. Lister himself says that the spray is the smallest part of the treatment.

50 per cent. of deaths used to follow amputation of the leg, now the death rate is 5 or 6 per cent. The case is not—did a lot do well without *antis eptics* but do all? He has notes of 20 major operations dressed antiseptically without a dea th and all but one healed by first intention.

Dr. TRENHOLME in over a thousand cases of midwifery he had attended, never had a case of septic, poisoning and only had two deaths, one from shock after delivery by forceps in a woman with a deformed pelvis. The second, a woman who got up and walked in the snow a few hours after delivery. He attributed hissuccess to following as far as he could Dr Goodell's teaching, which was to have his patients walk from the room they are confined in, into the room they intend remaining in during convalescence. Also getting the woman to sit up every day for a few minutes. This to favor expulsion of clots etc.

He was also very particular to see that the uterus after delivery was completely emptied of all membranes.

Dr. CAMPBELL said he always orders his patients to use an ordinary chamber instead of the bed-pan, thereby necessitating her sitting up.

CASES IN PRACTICE.

Dr. CAMPBELL related a case of a gentleman who had gonorrhœa 2¼ years ago, and who, about a week after marrying a perfectly healthy lady had a recurrence of a discharge similar to his old gonorrhœa. Dr. Campbell, asked would this be called a gonorrheal discharge and be infective? Several gave it as their opinion that it was a case of non-specific urethitis such cases not being rare in newly-married men.

Dr. GODFREY said he knew of a young surgeon who contracted gonorrhœa aboard ship from the water-closet.

Dr. GURD mentioned a case where a young man got gonorrhœa from wearing a pair of trowsers previously worn by a man who had that disease.

CHILD WITHOUT NIPPLES.

Dr. KENNEDY described the above condition lately seen by him in a boy, no rudimentary glands could be made out.

Dr. SHEPHERD said that more of such cases were recorded where deficiency was only on one side.

Correspondence.

To the Editors of the MEDICAL RECORD.

Would you further oblige by putting in the subjoined in your next number.

When *Wonderer* was in a state of wonderment, when he asked in your March number: "What a Christian M.D., or, for the matter of that, a Homeopathic or Hygienic M.D. would do if called upon to attend a case of cholera morbus," I imagined that by that enquiry, *Wonderer* looked upon cholera morbus (simple as it might be) beyond the remedial powers of either the Homeopathic or Hygienic M.Ds. alluded to. I therefore—without the intention of evasion—mentioned what had been done with the more severe disease of Asiatic cholera under the inspection of Dr. McLouchlan, because, if the Homeopathic treatment was so beneficial in the more severe form of disease, Wonderer might be satisfied that the more mild disease would likely be as easily controlled. I may say that although cholera morbus, cholera nostras, Europœa or Canadian, cholera Indica, Asiatica, may generally be easily differentiated, still there are some cases of British cholera, or Canadian cholera morbus, closely resembling the severest forms of the disease which occur in Asia, or any other country. I have seen such cases in Montreal, one of which was attended with incessant vomiting, alternated with profuse rice-water stools, the pulse hardly to be felt. There were cramps in the lower extremities, and over all the abdominal muscles, which were as hard as a board, at times causing the patient to writhe in pain with what little strength remained. There was excessive thirst, and inability to speak or open his eyelids, cold, clammy perspiration, with cold breath, and other symptoms, indicative of apparent fatal collapse, yet this case gave evidence of

recovery within three hours after the administration of the 3d decimal dilution of the homœopathically selected remedy. Instead of promising to tell Wonderer how to treat cholera morbus, simply upon its being named, apart from the totality or key-notes of the symptoms, in the case, presented; I told him to study such works as I referred to, and stated that he would find therein the appropriate remedy for the key-notes or totality of symptoms, although not for the treatment of the individual disease by mere name that is, the homœopathically correct method of prescribing, whether the disorder is cholera nostras, cholera Britannica or cholera Asiatica. He does not require to consult authorities, for what they would give in cholera morbus, or dysentery, or nephritis. He comes closer to the root of the evil the other way, besides it gives pleasure to some minds to know that you are prescribing according to a law of cure.

I likewise thought that *Wonderer* had considered that the allopathic treatment of cholera morbus was something substantial, bulky and efficient, in doing good instead of harm, and not a delusion and snare, as he infers, when he says in your May number, viz., "I do not believe that any remedy has yet been discovered which exercises any appreciable effect upon the cholera." ! ! !

Well, there is no accounting for beliefs; in this correspondence I am replying to the person in your March number, whose identity is recognized only by the words, "*I Wonder*" and in your issue of May by the word "*me*." These are synonyms not generally considered worthy of reply, but I am not at all disposed to find fault, with even these idiosyncrasies. The summation of the logic of "*me*," then, is this, "That Dr." McLouchlan, and all Homœopathic Physicians are deluded, into "thinking they are giving remedies when they are not." I suppose that "*me*" believes that that assertion is very strong in condemnation of McLouchlan and Homœopathy. However, I am not disposed to find fault with his right of belief, facts are better than beliefs in my estimation, and McLouchlan's and other similar testimonies relate *to facts*, regarding the cases of cholera McLouchlan saw, he says: "that all were true cases of cholera, which would have sunk under other than Homœopathic treatment."

Yours truly,

JOHN WANLESS, M.D.

MONTREAL, June, 1885.

Progress of Science.

ON HÆMOPTYSIS AND ITS TREATMENT.

By SEYMOUR TAYLOR, M.D. Aberd., Physician to the North London Hospital for Consumption, &c.

In discussing hæmoptysis and its treatment, I would at the onset wish to state that the following remarks relate only to such cases in which there is a suspicion that pulmonary tubercle is present. It is probably a correct assertion that there is no complication in phthisis more alarming to the patient and his friends than a severe attack of pulmonary hemorrhage. It is equally probable that of all the more grave symptoms of phthisis hæmoptysis is *per se* of less moment as regards its immediate danger than many others to which less attention is paid. In laying down this rule I refer mainly to an ordinary case of blood-spitting and such severe forms as suffocative hæmoptysis, in which an aneurysmal dilatation of a blood vessel suddenly ruptures, are not for the moment taken into consideration. The mental disturbance which a patient undergoes when suffering from hemorrhage is one of the difficulties the physician has to meet; but in many instances this great factor is overlooked, and we concentrate our energies in prescribing astringents which often fail, and perhaps as often do harm. The treatment generally advocated is guided by arbitrary rules; and remedies are ordered often with no scientific knowledge of their action, but more in accordance with empiricism. It is generally acknowledged that hæmoptysis, in however slight a form, is one of the sure signs of tubercular phthisis; but it will be as well to admit that it may occur without the presence of tubercle, and also that it may be found in some cases of phthisis in which the presence of tubercles is of secondary import as regards the cause of bleeding; or, in other words, that hæmoptysis may arise from disturbances in the vascular current through the lungs, such disturbances being independent of the presence of new growth. On the other hand, not a few cases of rapid phthisis run their course to a fatal termination without their having been at any period any hemorrhage whatever.

In a majority of instances I am of opinion there should be no undue precipitancy in employing many of the astringents usually advocated. It has certainly been my experience that in the early stage of pulmonary consumption a small amount of hemorrhage has been rather beneficial than otherwise. A blood-spitting at this period is merely a method of nature to alleviate a congested apex. Consequently it is a congestion we have to combat, not the subsequent hemorrhage. We see a similar course of events in epistaxis, in bleeding from the bowel, yet no medical man would think of applying astringents and styptics in these latter cases unless the amount of blood

lost be very great. On the contrary, he often finds painful symptoms, are dispelled by the very hemorrhage. But should such an occurrence happen in connection with the lung, we are told to give acetate of lead, gallic acid, and other astringents, which it is hoped will act on the vessels of the lung, a treatment which, I submit, is not correct, nor yet scientific. Our best treatment this period is to attend to the sufferer's general health and condition. Do not restrict him from gentle exercise, but at the same time distinguish between exercise and over-exertion ; and let us remember that the former has a tendency to the promotion of a more perfect circulation, and this, I take it, should be one of our chief aims in the treatment at this period. The patient suffering from hemorrhage of the first stage has, I find, a better chance of speedy recovery if he pursues a healthy occupation than one who is ordered to be confined to his bed. Blood-spitting is quite as frequent amongst the in-patients as amongst those attending the out-patient rooms ; and yet, owing to patients being admitted, according to priority of application, the cases are no more advanced in disease in the wards at Hampstead than they are in the out-patient rooms.

As regards climate, I believe we have in this country certain situations, the adaptability of which we have overlooked in our treatment of consumptives. It has been my experience that patients have derived much benefit from residence in the high lands around Buxton and the Derbyshire Peak. The few cases I have sent to that locality have certainly returned to town with much diminution in their worst symptoms, and notably with arrest of hemorrhage. On the other hand, I cannot speak so favorably of the results of residence at Bournemouth, Hastings, and other relaxing towns on our southern coasts. The treatment of the severer forms of lung hemorrhage occurring in the second and third stages is more difficult to determine. It is generally felt by the physician that some decisive treatment must be speedily adopted, some steps taken to at once arrest the copious bleeding. Notwithstanding this, I believe the experience of most practitioners will lead them to conclude that in a majority of cases the hæmoptysis stops spontaneously. We must remember the comparative rarity of death occurring from hæmoptysis. I have seen only one death occur during an attack. Other writers also confirm this opinion. For example, so careful and extensive an observer as Dr. C. J. B. Williams states that he has seen only three deaths from hæmoptysis. Again, the late Dr. T. Locock asserted that only 1 per cent. of the cases of hæmoptysis die from that cause, and even that is an average higher than I had expected. Taking these views as correct, I apprehend that the administration of large doses of gallic acid or of sulphuric acid is scarcely correct treatment. These drugs can have little or no effect on a remote apical lesion. On the other hand, I am sure I have seen them do harm by glueing up the intestines, and so favoring a continuance of the hemorrhage, by increasing the arterial tension. To my mind the administration of a purgative would be more rational treatment. A similar doubt as to the efficacy of some other astringent drugs has continually been under my consideration. With some medical men acetate of lead has great repute ; others employ chloride of sodium in large doses. Alum has its advocates, and so has tartar emetic, and even mercury. The clinical records of the Paris hospitals have been used to endeavor to prove the efficiency of ipecacuanha. Hamamelis has become a fashionable drug. As a consequence one is embarrassed with the number of remedies, some of which have been almost lauded as specifics. But I am obliged to say my experience of their power for real good is not satisfactory.

As regards outward applications, the conclusion I have drawn from careful observation is that an ice-bag placed on the chest is a valueless proceeding. I have never yet convinced myself that the application of such excessive cold can astringe a ruptured vessel through a pad of muscular tissue, of bones, and also (if the hemorrhage be deeply seated) of condensed lung. Further, the ice-bag is almost invariably planted over the front of the patient's chest, wherever may be the seat of the hemorrhage. I am more than doubtful how this application, with its damp depressing discomfort when placed on the parietes of a man's thorax, even over the supposed seat of a hemorrhage, can have any effect in arresting the same. We seem by this step to overlook the one great factor, rests in staunching an internal bleeding. It precluded the patient from sleep, his mind is disturbed in consequence, and he apparently loses rather than gains from the treatment. Does it not seem more probable that the cold, acting on the superficial vessels of the chest-wall, would rather tend, if anything, to increase an internal disgorgement ? On the other hand, I can with confidence recommend an opposite line of treatment—viz., the application of warmth. In three cases recently of severe hæmoptysis I have seen beneficial results from such steps. I applied hot flannels (at about 120° F.) over the angles of the ribs from summit to base of the thorax—in other words, over the sympathetic ganglia—and in each case with speedy and happy results. I cannot claim that this method of treatment is by any means novel. It was advocated by Dr. John Chapman in 1875 in an able paper ; and I submit that it has not been adopted by practitioners so frequently as it deserves. We see the same principle adopted by obstetricians in cases of uterine hemorrhages, and there is scarcely a week passes but the medical journals contain reports of successful treatment of flooding by hot-water injections into the uterus, as opposed to the old-established practice of applying ice.

Turning now to medicinal remedies, I must confess that we have only a few drugs which we may really regard as controllers of pulmonary hemorrhage; but these few are really valuable. We too often overlook the clinical fact that in hæmoptysis one of the most urgent conditions to treat is the great restlessness and mental disturbance of the sufferer. He is in a state of great excitement and alarm, a condition also imparted to his friends, and by them, as it were, reflected on the patient again. This point requires our skill and attention. We have at our command a drug, opium (and its derivatives) which acts like a charm. So far as my experience goes it should not be given if administered internally with any other remedy likely to retard or interfere with its full action. Give it in such doses that its physiological effects are produced. If the hemorrhage be very profuse digitalis may be added, but also in large doses, such as fifteen minims to twenty minims of the tincture, till its specific action on the heart is manifest and the frequency of the pulse materially diminished. As a result the patient is calmed, his excited circulation controlled, and he falls into a much-needed sleep. There is yet another method of administering the sedative —viz., by hypodermic injection; and I have found this plan most useful and efficacious. Four minims of the injectio morphiæ hypodermica are introduced into the subcutaneous tissue of the arm, or, as I have sometimes preferred, into the subcutaneous tissue of the chest immediately over the presumed seat of the hemorrhage, and repeated if requisite. The advantage of this method of exhibiting the remedy is its speedy action; the momentary and trivial disconfort of the operation is more than counterbalanced by the good results which ensue. Of the forty-seven cases the notes of which I have before stated form the basis of this paper, eighteen were adult patients suffering from severe pulmonary hemorrhage occurring in the second or third stages of phthisis, and were treated. by opium and digitalis internally or by morphiaf hypodermic injection, with good results in all. So far as I am able to judge of the effects o remedies the above method of treatment is happier in its immediate results than the administration of astringents and so-called styptics, which mainly affect the intestinal tract. Indeed, one of my chief desires in making this communication is to protest against the ordinary practice of prescribing drugs which probably do nothing more than produce a constipation, or the action of which on the circulatory system is more than open to doubt. There are, however, two other drugs which I have found extremely useful when opium is contra-indicated. I allude to oil of turpentine and the liquid extract of ergot. The former may be given by the mouth, the latter either by the mouth or by subcutaneous injection. I have seen excellent results from both in a few cases. The objection to turpentine is its nauseating effect, but its action in controlling hemorrhage is undoubted. My experience of ergot has not been extensive, but I found it a powerful remedy in four cases of severe and continued blood-spitting.—*Lancet.*

ON INTERMITTENT PULSE, AS A SIGN OF DISEASE, AND ITS TREATMENT.

By the Editor of The Asclepiad.

This affection is due to nervous exhaustion of the vital nervous system, and in this day of emotional strain and excitement it must prevail in proportion to the causes of it. In itself, when it is not present in an exaggerated degree, intermittency of the pulse is often less dangerous than it seems. It does not, as might be feared, carry with it the necessary idea of sudden dissolution from heart disease, for, as I have elsewhere shown, the heart is the regulator, not the prime mover, of the circulation. The harmlessness of the symptom in its moderate development is best shown by the facts of its common occurrence after middle age, and by the long duration of life in many of those who present it.

Occurring in young adults, it tells the story ocommencing failure of power. Occurring suddenf ly after any great event, which has told upon the mind, it may be a sign of serious import. In persons advanced in life, and in persons prematurely old, intermittency is often the herald of symptoms of nervous failure. In these examples the patient has sometimes a singular preconception of impending danger.

In the large majority of patients there is an unconsciousness of the intermittency. We listen to the heart, we hear the phenomenon distinctly; we ask the patient, at the moment, whether he is conscious of feeling anything peculiar; he tells you he is not. In such instances, the intermittent phenomenon does not cover more than what would be one or at most two natural periods of cardiac contraction, and there is a long interval before the return of it. But when the intermittency covers a period equal to five normal strokes, or when it is repeated in shorter periods several times in the minute, then the patient is painfully, often fearfully conscious of the fact. Then breathing becomes irregular, then there is difficulty in keeping the recumbent posture, then there is sleepless agitation errible mental depression, a constant dread of, death, sometimes with a singular longing for that event, and finally, death itself, not suddenly, but by a lingering and sinking asthenia. I have seen one well-marked case, in which it was impossible to attribute death to a ny other cause than intermittent cardiac action, and I do not remember any case where the symptoms, which long preceded death, were more acutely painful.

Persons in whom there is permanent intermittent action of the pulse pass through all acute diseases with less chance of recovery than others of similar age and like constitution who have no such failure. They sink more readily from surgical

operations, from falls and injuries, from influenza, from acute congestion of the lungs, from inflammatory attacks, and particularly from typhus and typhoid fevers. I would look upon a man's chance of recovery from typhoid if he were fifty years of age, and had a steady heart, as preferable to that of another man at forty, in whom intermittent action of the heart was developed before the occurrence of the disease, or in whom the symptom came on, as it sometimes does come on, in the course of the disease.

In adults, when the symptom is once established, it never, I believe, goes away entirely. It may be absent for long periods when the general health is good, but it returns on every occasion of depression of power, and is very easily re-induced by agencies which act deleteriously on the nervous system. Excessive venereal gratification, excessive smoking, deficiency of sleep, or dissipation, act powerfully in increasing the evil. In persons at or past middle age, the symptom, if it once be fully developed, continues persistently, and often to extreme old age. One of my patients, who died at eighty-six years of age, told me he had been discovered to have an intermittent pulse when he was forty-two, and that he had never failed to exhibit the phenomenon since that time. I have noticed often the hereditary character of the phenomenon. On the fact of heredity, there can, I think, be no doubt.

There is no known specific treatment for intermittent pulse, but whenever the symptom of intermittency is present, there are certain general lines of treatment which should always be enforced by the physician. In the case of young children, when the intermittency is clear, however infrequent it may be, the utmost care should be taken to avoid every source of mental emotional excitement. A child having intermittent pulse should not, under any pretence, be oppressed with study. He should not be subjected to any amusements which powerfully excite the mind; he should not at any time be exhausted by physical fatigue; he should be well fed, warmly clothed from head to foot, and above all things, should be allowed to have abundant sleep. Ten to twelve hours' sleep is not a moment too much. Moreover, such a child should never be put to sleep with stories which excite dreams or cause alarm. In adults, equal care should be taken, and, above all things, attempts should be made to remove impressions derived from any untoward event. Change of scene should be recommended, while a carefully regulated diet, abstinence from exhausting pleasures and abstinence from exhausting labor, especially mental labor of any one particular kind, should be encouraged. Good sleep is here again the most valuable of remedies. Eight hours of sleep out of the twenty-four are essential, nine hours are still better. Two other special points of advice are of moment. It not unfrequently happens that, by accident or by direct information, patients learn the fact that their pulse intermits. Then they begin to feel their own pulse, and become charged with dread of sudden death. As the disorder is of itself mental, this watchfulness and fear will increase the frequency of the intermittency. With these patients, a word from the physician, timely and firmly spoken, is often the best prescription. He assures them, on the results of experience, that their malady is not of necessity fatal; he recommends them not to enquire after the symptom, and if he can succed in persuading them to his views, which he may honestly try to do with all his influence, he will effect the most marked improvement in their condition. Again, it sometimes happens that patients conscious of the failure of the heart resort to alcoholic stimulants as a means of relief. For a moment, by its exalting the activity of the heart, alcohol affords relief, but the depression that follows calls the more rapidly for a return to the supposed remdy, and a fictitious benefit leads to a habit which excites structural changes and hastens death. Concerning aged people who suffer from what may be called chronic intermittency without consciousness of the symptoms, no special rule requires to be laid down. They are themselves usually too tired of the excitements of life to care for them, and if they are not, then the observance of the general principles applicable to children and adults extends equally to them.

Whenever with intermittency of the pulse there is anæmia with inactive condition of the bowels, and distention of the stomach and intestines with gas, it is very good practice to add, to the general rules of treatment, "a tonic," so called, and of all tonics Easton's Syrup of the Superphosphate of Quinine, Iron, and Strychnine, is one of the best. This syrup, which contains the thirty-second part of a grain of strychine in a fluid drachm, should be administered in doses of a drachm three times daily, a little time after food, and the patient should be induced to look upon the remedy in the light of a food rather than a medicine. The syrup, under the careful observation of the practitioner, may be continued for two or three months at a time without danger. When there is much restlessness with the intermittency, as well as want of power, I am accustomed to administer one or other of the bromide syrups. The syrups of the bromide of Iron, Quinine and Strychnine, or of the Bromide of Iron and Strychnine, or of Quinine, and Strychnine without the Iron, replace Easton's preparation very effectively. The dose of these syrups is one fluid drachm.

There are classes of cases in which intermittent pulse is connected with great general prostration and premature breaking up of the body; cases in which there is some organic disease, such as chronic bronchitis, emphysema, senile phthisis, chronic degeneration of the kidney, or other organic change; or some general systematic disorder, such as diabetes or cancer. In any of

these cases the intermittent action is a terrible addition to the distress of the sufferer, and it may require to be treated itself as the worst present evil.

I have made many inquiries in order to ascertain if there be any one particular remedy which so influences the nervous mechanism of the heart as to exert an immediate controlling effect over intermittent action. The result of my research is that there is only one agent which can be said positively to influence it effectively—I mean to influence it *at once* in such determinate manner that an effect is seen to follow upon a cause. The agent to which I refer is alcohol, and the mention of alcohol brings up the whole question of its use in cases of intermittent action. In intermittent pulse this direct action of alcohol on the heart is shown with singular effect. I have seen in an extreme case, where the fact of intermittency was recorded ten times in the minute at least, a total cessation of the phenomenon within five minutes after the administration of six fluid drachms of pure alcohol in water, the circulation at the same time being rendered more rapid. This action of alcohol is so decisive that the patient himself soon becomes conscious of it, and unfortunately resorts sometimes to the remedy to his ultimate disadvantage.

Contrary to what I originally taught, I now recommend that the sufferer from intermittent pulse should abstain from every alcoholic drink known as a common drink or beverage. At the same time I would not withhold the occasional use of alcohol in extreme conditions, or what may be called emergencies. If after great fatigue or excitement or anxiety, there is sleeplessness, restlessness, and painful knowledge, on the part of the patient, of the hesitation of the circulation, half a fluid ounce to six fluid drachms of pure alcohol, mixed with warm water, will act, generally, in the most effective manner. It will bring rest, and often sleep. But it must be repeated only after an interval of seven or eight hours; if it be carried to the extent of producing the third, paralysing or narcotic, degree of alcoholic stimulation it will have conferred evil instead of good.

In some instances, instead of prescribing common or ethylic alcohol, I substitute pure methylic alcohol. This is a much lighter spirit, and is eliminated more quickly from the body. The dose is the same as for common alcohol, and may be prescribed in precisely the same way, with the advantage that it may be more frequently repeated than the same dose of ethylic alcohol. It will be seen from these observations that I recommend the use of alcohol purely as a medicine. I do so most earnestly, under the conviction that whenever it is more than a medicine it is far more harmful than useful.

Tea does not produce intermittent pulse, but when the symptom is present it very seriously increases it; tea, in short, is an article of diet which in all cases of irregular action of the heart should be scrupulously avoided. Coffee is less objectionable. Food should be taken by sufferers from intermittent action in moderate quantities and *frequently*. Long fasting is unspeakably prejudicial, and makes itself speedily felt by the patient, who suffers, while fasting too long, from an indescribable exhaustion, which is not hunger and not faintness, in the natural sense of those terms, but a strange mixture of both sensations, with a frequently recurring impression that if food do not immediately come death must. The nervous supply of the heart in these cases is sensitive to the least failure of power, and requires renewal every three or four hours during the working day. At the same time the system rebels against a large, oppressive meal difficult of digestion. Care should be taken, also, to protect the body from damp and wet. In a word, every such provision should be made as will sustain equality of the vital processes, so that the nervously disabled heart may neither wait long for new support nor be overtaxed with work.

[In our experience intermittent pulse in middle life is almost always connected with anxiety—usually pecuniary or business anxiety.—EDS.]—*The Asclepiad.*

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COLLEGE OF PHYSICIANS AND SURGEONS PROVINCE OF QUEBEC.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held at Montreal on the 13th inst. The President, Dr. Lemieux, in the chair. There was a good attendance of governors, among them the Hon. Dr. Robitaille, ex-Lieut.-Governor of Quebec.

Reports from assessors of McGill, Bishop's, Victoria and Laval (Quebec and Montreal), were received and adopted.

The Report from the Board of Preliminary Examiners was read. Sixty-two students presented

themselves, of whom 29 who went up for the first time were successful; 10 who presented for the second time were successful; 17 were rejeted on certain branches, while 6 were rejected for general deficiency.

The report of the agent of the College, Mr. Lamirande, was read. During the past six months, the College gained six cases, lost one, and five are still before the Court.

A petition from Mr. Tierney of West Farnham to be allowed to continue to practice medicine, on the ground of his having done so for 25 years, was refused, the College not being possessed of any such power.

A report on certain charges made against the College agent, Mr. Lamirande, was presented. It stated he was not free from blame, had acted beyond the scope of his authority, and recommended that his duties be more clearly defined.

A motion was made by Dr. Durocher, seconded by Dr. Rinfret, suggesting that at the preliminary examination for admission to study, the papers of candidates should not bear the name of the writer, but that of a *nom de plume*.

A report was presented from a committee appointed at last meeting to examine the financial condition of the College. Its consideration was postponed till next meeting.

A notice of motion was given to place the collecting of the annual dues again in the hands of the Registrar, and for this and his duties of registrar pay him $400 a year.

On the report of the commitee appointed one year ago to investigate the charges made by Dr. Lachapelle against Victoria College, the consideration of which was postponed from the last meeting, being brought forward, it was moved by Dr. Marsden, seconded by Dr. L. Larue, that the report of the committee be received. This was carried without discussion.

A notice of motion authorizing the President in certain cases to issue an interim license was brought forward and carried unanimously. The notice of motion for a Central Examining Board received a six months' hoist.

MONTREAL GENERAL HOSPITAL.

The annual meeting of the Governors of this Hospital, which was held on the 21st of May, was looked forward to with considerable interest, as the vacancy on the attending staff of physicians, created by Dr. Osler's removal to Philadelphia, had to be filled. Although a vacancy on the outdoor staff had also to be filled, the interest centred in Dr. Osler's vacancy. The candidates were Dr. R. L. MacDonnell and Dr. F. W. Campbell, and the result was the election of Dr. MacDonnell, who polled 93 votes and Dr. Campbell 71 votes. Both sides we presume brought forward every vote in their power, and the number polled is, we believe, the largest in the history of the Hospital. If the contest had been an ordinary one we would have been content to have simply chronicled the result. It was, however, not an ordinary one. It was a contest between the old established Medical Faculty of McGill and the younger Medical Faculty of Bishop's College, the former being determined to maintain their monopoly, which, so far, they have been enabled to do, of the Indoor Staff. That the feeling among the Governors of the Hospital against this exclusiveness is very strong is proved by the large vote Dr. Campbell polled; and, although defeated for the time, we are satisfied that the day of victory is not far distant. We feel confident of this because, the principle for which Bishop's College is fighting is one which must in time commend itself to all who believe in British fair-play. It is a principle which has not been fought for the first time within the walls of our General Hospital. Other hospitals in our own country and abroad have felt the dead weight which attach to such monopolies, and the result has been their complete destruction. We believe a similar fate awaits it here.

THE DAVIS & LAWRENCE COMPANY.

Among the constant advertisers in the CANADA MEDICAL RECORD is the firm now known as the Davis & Lawrence Company. For many years they have occupied several of our pages, their steady support being, we believe, mutually advantageous. We have noted their onward progress, and have with much satisfaction watched their constantly-increasing success, reflecting, as it does, the greatest credit upon its management. From comparatively small premises in the city proper, they, a few years ago, moved into the Western suburbs, occupying there a building of considerable dimensions. This was soon found to be too small for their steadily-increasing business, and a few months ago they left their old quarters to

occupy a manufactory specially erected for them. This establishment, a cut of which we give, is not surpassed either in the United States or Canada. In extent it covers three sides of a square, having a total frontage on three streets of 404 feet, with an inner court in which is built the boiler house. It is four stories high, with the basement, and is built entirely of brick and stone, the St. Antoine street front being handsomely faced with sand stone. For substantial structure and architectural beauty it is doubtful if it is excelled by any factory building in Canada. Every modern improvement that would facilitate the business has been adopted, such as steam elevators, hand railways, machines for bottle-washing, bottle-filling, bottle-corking, etc.

Commencing at the top floor, which is set apart entirely for laboratory purposes, was found long rows of percolators for the manufacture of fluid extracts, pill-stamping machines, great copper boilers, huge tanks, and many other things too numerous to mention.

Hundreds of preparations are manufactured in this establishment, comprising Fellows' Syrup of Hypophosphites, which is so highly valued as a tonic in wasting diseases, etc., and which is so extensively prescribed; Murray & Lanman's Florida Water, the original and only genuine Florida Water; Brown's French Dressing, that favorite polish for ladies' shoes; "Maud S." Condition Powder, which is now taking high rank in the estimation of horse owners; Burnett's Standard Preparations, consisting of flavoring extracts, etc.; Lotus of the Nile, that Queen of Perfumes; The "Royal" flavoring extracts, new and popular; Ricksecker's elegant line of first class perfumes; Wyeth's splendid line of pharmaceutical preparations, which are so highly spoken of by physicians as being thoroughly reliable, comprising a full and complete line of elegant medicinal Elixirs, Fluid Extracts and Compressed Pills, besides their celebrated "Beef, Iron and Wine," "Chlorate of Potash Tablets," "Menthol Pencils," etc., etc. All these and many others are manufactured in this laboratory department. Descending to the next floor we find the bottling and packaging department and store rooms for finished goods; here also printing presses are at work, for this company do much of their own printing work. Again descending we come to the finishing apartments, shipping departments, sample room, and the handsome and spacious offices. The basement is used for the storage of cased goods and as a bonded warehouse.

VACCINATION.

The recent outbreak of variola in Montreal, an unfortunate occurrence in itself, has been attended by several most unpleasant circumstances. The non-isolation of the first case which arrived in the city, and was taken to the Hotel Dieu Hospital, has already been referred to. The quality, of the vaccine furnished by the officer of the Health department being called in question a committee of Medical experts was formed, who examined several of the large institutions where many inmates had been vaccinated, and found indisputable evidence of the introduction of septic matter into the wounds produced to receive the vaccine virus, and of course, several cases occurring together and with the same history, the conclusion was inevitable that the vaccine virus used had not been pure.

The result is particularly to be regretted, since in Montreal, among a certain class, there is already such a strong feeling against the adoption of that sure and certain preventative and, if carefully prepared, that safe preventative, of one of the most dreaded and loathsome of all preventible diseases. And yet in the face of such an experience as this we find the authorities that be fighting and squabbling over the appointment of a Medical Health Officer, evidently the prime consideration being nationality and religion rather than training, executive ability and knowledge of the duties pertaining to the office. Where will this sort of thing, if persisted in, lead us to?

MEDICAL JOURNAL ADDRESSES.

We have just received from the Illustrated Medical Journal Co. of Detroit, Michigan, several sets of their Perforated Adhesive Medical Journal Labels. The list includes besides the Journals of the United States that are devoted to Medicine Pharmacy and Hygiene, those of the Provinces of Canada as well. Four complete sets will be mailed postpaid for fifty cents on addressing the publishers above named. They are just what every physician needs for addressing his Reprints for journal notice, and Medical Colleges for addrssing their Announcements for a similar purpose.

ACTIVE SERVICE IN THE NORTH-WEST.

It was not very creditable to our profession that of the two regiments called on active service in the North West neither took their gazetted medical officers with them, substitutes being provided. Where all the officers had to suffer some loss, either of business or income, the same should have been expected of the Surgeons. In the case of Dr. Mignault there was, however, a more valid excuse which was mentioned in a previous number. Since then Dr. Mignault has written us as follows:

"On the 2d of March, I had an attack of *hmoptysis*, after a rather long lecture in my anatomical amphitheatre.

The 65th was called out on the 28th of March. I consulted several physicians as to the advisability of my going, their opinion was unanimous, under the circumstances, against the journey.

I furnished my substitute with a complete *suit* and all necessaries for the trip.

Since then, feeling better, I wrote to Lieut.-Col. Ouimet, placing my services at his disposal, if required for the Battalion."

PERSONAL.

Dr. O'Reilly, Medical Superintendent of the Toronto General Hospital, sailed in the *Parisian* of the Allan line for Europe on the 30th of May.

Dr. William Gardner has been elected Gynecologist to the Montreal General Hospital.

Dr. George W. Major has been elected Laryngologist to the Montreal General Hospital.

Dr. R. L. McDonnell has been elected a Physician to the Montreal General Hospital, in place of Dr. Osler resigned.

Dr. A. D. Blackader and Dr. F. W. Campbell have been elected Assistant Physicians to the Montreal General Hospital.

Dr. James Bell has been elected an Assistant Surgeon to the Montreal General Hospital.

Dr. William Stephen of Montreal has recently left the city for Vienna, intending to devote his attention to Diseases of the Eye and Ear. It is said that his intention is to settle in Buenos Ayres.

Dr. Wm. McClure (M.D., McGill) has been elected Medical Superintendent to the Montreal General Hospital.

Dr. Major, Laryngologist to the Montreal General Hospital, has gone to Vienna for a few months.

Dr. Finley of Montreal, Dr. Gustin of London and Dr. Eberts (M.D., McGill, 1885) have been appointed Resident Medical Officers of the Montreal General Hospital.

REVIEWS.

The London Medical Student and other Comicalities. Selected and compiled by HUGO ERICHSEN, M.D. Detroit, Michigan, 1885.

It is almost half a century ago since the London Medical Student was published in the London *Punch*, and when we began our studies a quarter of a century ago it formed part of almost every medical students' library; lately, however, it has been difficult to obtain, and therefore has not been as much read as formerly. Dr. Erichsen has therefore done a thing to be commended in re-printing it, on this side of the Atlantic, for a more enjoyable medical sketch is not to be found. The medical man who can read it and not be convulsed with laughter is one to be pitied, for it is full of wit and humor as a nut should be full of meat. The remainder of the book is full of medical jokes collected from an immense number of sources. Many of these are splendid, and Dr. Erichsen has done the profession a good service in collecting them in so permanent a form. Altogether the book is well worth the cost, and it should be in the hands of every medical man in the Dominion. We predict for it a large sale. It can be ordered direct from Dr. Erichsen.

The Oleates: An Investigation into their Nature and Action. BY JOHN U. SHOEMAKER, A.M., M.D., Lecturer on Dermatalogy at the Jefferson Medical College; Physician to the Philadelphia Hospital for Skin Diseases; Member of the Pennsylvania State Medical Society; The Minnesota State Medical Society; The American Medical Association; The American Academy of Medicine; The British Medical Association; Fellow of the Medical Society of London, etc., etc., etc.

In this book Dr. Shoemaker gives an account of his investigation concerning the oleates. The author is certainly one of the best authorities on this new and very useful class of remedies.

The indication and method of preparing the different oleates are very clearly given. No physician pretending to treat skin diseases should be without a copy of this very instructive little book.

THE CANADA MEDICAL RECORD.

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Original Communications.

CHOLERA AND THE COMMA BACILLUS

By J. B. McCONNELL, M.D., C.M.,

Professor of Materia Medica, and Therapeutics and Lecturer on Histology Medical Faculty Bishop's College.
(Read before the Medico-chirurgical Society, June, 1885.)

I draw your attention to this subject this evening more with a view of eliciting a discussion upon it than with the hope of adding anything to your knowledge concerning it.

It is well, I think, that we should now especially direct our attention to the consideration of what is already known about cholera. Few of us have ever witnessed an epidemic of this affection, but it is the expectation of many, and a study of the history of previous epidemics would indicate that we may be called upon this summer to contend with an invasion of this scourge, which, in a majority of instances, baffles the most skilful treatment and resists every device of therapeutics.

All epidemics of cholera have their origin in the region about the delta of the Ganges in India, and the course pursued by those which have reached this continent has usually been north-westward through Afghanistan and Persia, over the Caucasus, or along the Caspian to Russia, thence through northern Europe to England and across the Atlantic. The epidemic which threatens us this year is taking a shorter route: it left its seat about 1880, prevailed in Arabia in 1881 and 1882, ravaged Egypt in 1883 and France in 1884.

This year, its existence has already been reported in Calcutta, Toulon and Marseilles, and in the province of Valencia and other parts of Spain it is epidemic. Should it spread to England the probability of its being conveyed to this country will be great.

Before entering upon the subject indicated by the title of this paper I may mention a few facts concerning disease germs:

The germ theory of disease refers to the introduction into the system of the lowest type of plants which, from being found in the body in connection with many specific diseases, are supposed to be their cause. They belong to the lowest group of plants, the protophyta, class schizomycetes, order bacteriaceæ. These minute plants (bacteria) consist of a single cell, and reproduce themselves by dividing into two (fission), and these again into two, and so on as long as they are provided with nutriment; failing which they form a powdery precipitate, which is regarded as a resting state. The spores thus formed having the power of germinating again when the surroundings are favorable. Bacteria require moisture or fluids for their development. They consist chiefly of protoplasm, have no chlorophyll, and are sometimes provided with cilia (also called the flagelli) which by their lashings enable them to move about in liquid media. The cells sometimes appear in groups, held together and separated from each other by a jelly-like matrix, formed by a partial degradation of their cell walls. This is called the zooglea form.

Pasteur terms bacteria which require free oxygen, *aerobies*, and those which can live without free oxygen but have the power of wresting it

from its combination with other elements, *anærobies*.

There are three sub-divisions or genera of bacteria:—i. Micrococcus, when the cells are round- or elliptical; diplococcus, two of them joined together; streptococcus, if united into a chain. ii. Bacillus cylindrical rod-like or filiform cells. Cohn termed curved filiments vibrios. iii. Spirillum, spirally twisted or screw-shaped cells.

In order to detect these minute and almost invisible organisms and study their characters and habits, microscopes magnifying from 400 to 1,000 diameters are required. They are so minute that according to Dr. Dallinger 50,000,000 would not occupy a space greater than the 1-50th part of a cubic inch. They are found wherever organic matter, animal or vegetable, is undergoing decomposition, in stagnant water, and all solutions containing organic substances, and dried bacteria or their spores are found in myriads adhering to every object around us and to the minutest particles of dust floating in the air, seen in a ray of sunlight, and which make the ray visible.

The decomposition or putrefaction of organic matter and the process of fermentation are solely the result of the life-work of bacteria.

Having no chlorophyll they develope only in fluids and other media containing organic matter, and thrive best where it is abundant.

They develop very rapidly under favorable circumstances; according to Cohn a new genera tion can form in an hour. They require a certain amount of heat for their development which varies with different species; cold and high temperature arrest their development; in the moist state a temperature of 140° F. will destroy them, but a higher degree is required in the dry state.

The spores of bacteria are of all living matter the most difficult to destroy, are unaffected by low temperatures, and require in the moist state the temperature of boiling water to destroy them, and when dry a temperature of 300° and over. Bacteria thrive best in alkalne solutions, hence in the stomach the normal acid present during the process of digestion checks their growth, but they grow luxuriantly in the intestines where they are supposed to assist in normal digestion. In normal healthy animals they are not found in the blood or tissues. The latter must have the power of overcoming the ordinary bacteria of putrefaction; but certain species are capable of holding their own there and multiplying, when a disturbance in the animal economy ensues, which is shown in the symptoms of the various infectious diseases. These are the diseases producing a pathogenic germs.

It was a Dutch microscopist named Leeuwenhoek, who first announced, in the year 1683, the discovery of these minute micro-organisms which are now known to be so intimately connected with the processes of disease, fermentation, decomposition, etc., but it is only by investigations made during the past 20 years that most of the knowledge we now possess on this subject has been gained. Conspicuous among those who have labored in this field stand the names of Louis Pasteur and Dr. Koch, although much has been learned from the researches of Cohn, Rayer and Davaine, Loeffler, Toussaint Chauveau, Buchner, Klebs, Tommasi Crudeli, William Budd, Watson Cheyne, Bilroth, Ehrlich, Lukomsky, Klein, Vandyke, Carter Luginbuehl, Oertel, Hansen, and many others.

Bacteria have been discovered by different observers associated with the following affections, and have in some of them been satisfactorily demonstrated to be their cause, anthrax, pyæmia, septicæmia, osteo-myelitis, malignant œdema, erysipelas, glanders, relapsing fever, typhoid fever, variola, cow-pox, and sheep-pox, virus, measles, diphtheria, malarial fever, syphilis, gonorrhœa, endocarditis, croupous pneumonia, pertussis, trachoma, pterygium, tuberculosis, and some others.

Recently Pasteur has discovered a micro-organism in hydrophobia and by attenuating the germs and inoculating dogs with them has rendered the latter insusceptible to the influence of the most potent rabic virus.

From these facts the existence of a cholera germ would seem to be very probable, and accordingly we find that for forty years back search has been made for it. Bohm, in 1838, found cryptogamic bodies like ferment fungi in the dejecta and intestines. Brittan, Swayne, and Hughes Bennet found micro-organisms in the Bristol epidemic of 1849. Vibrios were discovered by Pouchet and cercomonas by Davaine; and Paccini in 1854 and 1856 discovered bacteria in connection with this disease. Dr. Bristowe, in 1866, seems to have approached nearest to the discovery of the cholera bacillus; he found a curved bacillus, but the cessation of the epidemic rendered further study of the germ impossible. McCarthy & Dove found motile elements.

Researches have also been made in this direction by Hallier, Klob & Thorm, Debary, Cohn, Cunningham and Lewis. Dr. J. C. Peters, New York states in the *Medical Record* that Dr. Dundas Thompson and Dr. Hassal discovered vibrios in 1854, and in 1872 Dr. Nedwetsky found bacteria in the rice-water discharges, and in experimenting with them found out of a great many drugs only tannin, chlorine water and dilute sulphuric, hydrochloric and nitric acids were capable of destroying them.

No other theory of cholera or other infectious disease would so fully explain all their characteristic features as the doctrine that they depend on distinct species of micro-organisms, which has been advocated so long by the ablest writers on the ætiology of disease. The recognised power the virus has of multiplying itself within and outside the body, the fact that it develops only when organic nutriment is furnished, and requires heat, moisture and oxygen, and the deleterious influence of cold, high temperatures and drugs inimical to plant life; the power the poison has of retaining its virulence on fumilis, etc., after long intervals; the fact that the poison of each infectious disease has distinct characteristic actions upon the system, which are uniformly maintained, although in varying degrees; the period of incubation; self-limitation and definite duration, can only be clearly explained by the theory that the cause is a living organism, each disease having a distinct species of parasite. The fact, already fully demonstrated, that some infectious diseases are produced by parasitic plants, would seem to place the matter beyond theory and to be a very strong argument in favor of the view that all are likely to own a similar cause, hence an important field of bacterioscopic enquiry opens up: the discovery of the germ belonging to each affection and the study of its peculiar characteristics, what circumstances and agents favor its development, and what hinders. In this way we may hope that, in the near future, the treatment of these affections will be removed from the empiricism which has hitherto prevailed, and a rational, scientific system of therapeutics pointed out.

As yet the agents found to be destructive to these bacteria outside the body would, in the strength required, be fatal to the patient if administered as remedies. The discoverer of a remedy which will arrest the development of bacteria in the system, and at the same time be innocuous to the host, will confer a boon on humanity that will place his name among those of the highest rank of human benefactors.

John Tyndall, in his introduction to the life and labors of Louis Pasteur, written recently by the latter's son-in-law, and translated by Lady Claud Hamilton, states in reference to this subject: "never before during the long period of its history did a day like the present dawn upon the science and art of medicine; indeed previous to the discoveries of recent time medicine was not a science but a collection of empirical rules depending for this interpretation and application upon the sagacity of the physician." "A great scientific theory has never been accepted without opposition. The theory of gravitation, the theory of undulation, the theory of evolution, the dynamical theory of heat, all had to push their way through conflict to victory, and so it has been with the germ theory of communicable diseases." Where the mind of genius discerns the distant truth which it pursues the mind not so gifted discerns nothing, but the extravagance which it avoids.

Bacteriology will doubtless soon become a part of the regular curriculum of medical studies. In Germany the Government last year summoned to Berlin medical men from various parts of the empire to study the method of Koch and others for investigating bacteria and micro-organisms, and other countries will doubtless soon follow in this line of advancement.

All believers in the germ theory were filled with hope when it was announced that Dr. Robert Koch, chief of the German Scientific Commission for the Investigation of Cholera, had gone to Calcutta to investigate the supposed cholera germ. His brilliant discovery of the bacillus tuberculosis, in 1882, had already caused him in the estimation of the scientific world to be regarded as the most eminent and reliable living bacteriologist.

In his report of January, 1884, he announced the discovery of a bacillus occurring invariably in the cholera discharges and intestinal contents, and also in the intestinal mucous membrane, but not in the stomach.

The lower part of the ileum was the chief seat of the bacilli. When Peyer's patches were reddened he found a considerable invasion of bacteria occurring partly within the tubular glands, partly between the epithelium and basement membrane, and in some parts deeper still. The bacilli were found most abundantly in acute cases, in later stages they

were replaced by bacteria of decomposition, disappearing with the return of fecal discharges and entirely absent when death resulted from the sequelæ of cholera.

He could not find this bacillus in healthy persons nor in any other affections, even in such allied ailments as diarrhœa, dyssentery, etc. He found the same bacilli in a water tank which was supposed to have spread the disease. These tanks supply the water used for bathing, drinking and laundry purposes, the linen of the first cholera patient was washed in the tank, and out of the two or three hundred people living around it and using the water, seventeen died. He could not find the bacillus in any other tanks, and no cholera existed near any of them. When the bacilli disappeared from the water of the tank around which cholera prevailed the epidemic ceased.

The bacilli were curved like commas, and were sometimes joine together, appearing like the letter S, hence he thinks they may be spirilli rather than bacilli. They are very mobile, and occur in colonies of wavy masses. By cultivating them he learned that they thrive best at a temperature between 30° C. (86° F.) and 40° C. (104° F.), but their growth is not prevented by lower temperatures until 17° C. or 16° C. (60 4-5° F.) is reached. He exposed them to a temperature of—10° C., thus freezing them, but they would afterwards grow in gelatine. They required oxygen for their growth, but being deprived of it did not kill them. They grew with exceptional rapidity, the growth quickly attaining its maximum and after a brief stationary period as quickly terminating. They grew luxuriantly on linen or soil moistened with choleraic discharges, quickly outnumbering all other bacteria present, but after two or three days the bacteria of putrefaction would replace them. An acid condition of the medium in which they were cultivated checks their growth.

In regard to the influence of drugs upon them he found that 1 part of iodine in 40,000 had no effect on their growth, 1 part of alcohol in 10 was the least proportion that had any influence upon them, 2 per cent. solution of sulphate of iron, which will arrest putrefaction, did not affect the comma bacillus, nor did 2 per cent. solution of common salt,—a greater strength than those could not well be used for internal administration. Alum 1 in 100 prevents their growth, and so does camphor 1 in 300, carbolic acid 1 in 2,500, quinine 1 in 5,000, and corrosive sublimate 1 in 100,000. But these proportions place their administration beyond the range of practical therapeutics.

An important point is the fact that drying the bacilli for an hour or so readily destroys them. Hence he doubts if they ever pass into a resting-state. He cultivated them for six weeks and no spores were formed, but they may yet be discovered. Infected clothing or earth, when subjected to drying for 24 hours and upwards, were completely disinfected.

Koch had not been able to produce cholera in animals by inoculating with the comma bacillus, but two Swiss physicians, Drs. Reitsch and Nicati, at Marseilles last year succeeded in doing so, by placing the virus in the intestines below the stomach, and Dr. Koch subsequently confirmed these experiments. Guinea pigs dying with symptoms of cholera in 12 hours after being inoculated with an attenuated virus. The bacilli are usually destroyed in the stomach, but when this organ is deranged and the food partially digested, the bacilli may pass to the intestines, where they immediately begin to multiply. The symptoms which follow are supposed to be caused by the action of a specific poisonous substance produced by the bacilli. The cells of the mucous membrane are destroyed and the watery portion of the blood is poured out at the seat of the irritation.

The fact that the bacilli are soon destroyed by drying would favor the view that the poison of cholera is usually conveyed through fluids or damp clothing and not by the atmosphere. Dr. Koch says it is not proved, and doubtless never has occurred, that cholera has been transmitted by letters. The rapid development and decline of the bacilli would seem to accord with the brevity of an attack of cholera and the comparatively short duration of a cholera epidemic; and no pores being formed also accords with the fact that cholera does not usually reappear in the year following an epidemic.

The invariable occurrence of the comma bacillus in connection with cholera suggests a means of at once recognizing its presence by an appeal to the microscope, and the cultivation of the bacilli, and thus in doubful case, valuable time might be gained for adopting measures towards checking the spread of the disease, and if recognized in individuals appropriate treatment might be employed in the earliest stages when only, as a rule, it is likely to be successful.

In regard to treatment, the discovery of the bacillus has not as yet pointed to any resource not hitherto amply tested. In the early stages opium is undoubtedly the sheet-anchor, although the manner in which it affects the bacillus is not yet understood, and as the mineral acids and camphor are inimical to the growth of the bacilli these may be added, and together with spirits of chloroform and some of the essential antiseptic oils, as cajeput cinnamon, peppermint would seem to be an appropriate treatment. Cold checks the growth, hence heat and friction should be applied to the extremities, and ice to the abdomen, and the free use of ice-water draughts acidulated with sulphuric, nitric hydrochloric acids or liq. acidi phosphori should be allowed. The bacilli are said to be in the intestines only, and not in the blood, hence if the mucous surface could be flushed by the free use of such drinks benefit should be obtained from their specific action in addition to the advantages gained from their astringent effect.

As the bacilli are destroyed by drying and by high temperature, the employment of dry heat is thus suggested as the best means for destroying them. Dr. Koch found corrosive sublimate the most efficient destroyer of germs, although, according to Miquel, it is only one-third as powerful an antiseptic as the bin. iodide.

As the bacilli are found chiefly in the intestinal discharges, their complete destruction by burning or disinfection would prevent the spread of the disease, and as their growth outside the body depends on the presence of organic matter the entire removal from about dwellings of all organic refuse matter, and absolute cleanliness of house and person, and keeping cholera dejecta out of the sewers, would be efficient preventative measures.

Koch's discovery of comma bacillus and his conclusion, strengthened bythe results of subsequent investigation in Egypt and Toulon, that it is the cause of cholera has, led to considerable controversy, and has during the past year agitated the scientific world more than any other subject. His opponents cite such alleged facts as the following in opposition to his views. Thus Drs. Finkler and Prior of Bonn, and Klein and Gibbes, London, claim to have discovered the comma bacillus in sporadic cholera, and the latter found it also in dysentery, phthisis and in the mouth. Dr. Deneke, of the Hygienic Institute, Gottingen, has found a comma-shaped organism in stale cheese. W. D. Muhler discovered a bacillus in the saliva, which Dr. Lewis believes to be identical with Koch's bacillus. The reply to these objections, by Dr. Koch, Mr. Watson Cheyne and Dr. Heron, London, Dr. Van Ermengen, Belgium, and other investigators, is that morphological criteria alone are not sufficient to show that the bacilli are identical. Their physiological characters must be similar. Under cultivation the mode of vegetation and the colonies, etc., of the above are quite different from the cholera bacillus, hence they are distinct species.

Dr. Emmerich, of Munich, who was sent to Italy by the Bavarian Government, supported by Buchner, claims to have discovered a bacillus in the blood and internal organs, which he believes to be the true cholera bacillus, and M. Strauss and Roux, of the French cholera commission, who, in their investigations at Toulon last year, found the comma bacillus—the result of their researches in the main coinciding with those of Dr. Koch—also claimed to have discovered a bacillus in the blood. But Dr. Koch points out that in healthy blood, besides red and white corpuscles, there exists in varying numbers small, roundish pale elements, the so-called "bloodplates"; in some febrile diseases they are greatly increased, and are often mistaken for bacteria. Ignorance of this fact led the French commission to conclude as they did.

At the meeting of the Royal Medical and Chirurgical Society of London, held on March 24th and 31st last, cholera was the subject for debate. Drs. Klein and Gibbes, of the English cholera commission, who were sent to India to study the relation of the comma bacillus to cholera, arrived at conclusions mostly adverse to those of Koch. Yet they do not deny having found Koch's bacillus in all cases examined, but they are inclined to look upon them as a post-mortem occurrence, and they could not produce any effect by inoculation, but Koch himself, the ablest experimenter living, failed also in his first attempts. Dr. Klein held views previously in regard to cholera which he could not well maintain if Koch's conclusions are correct, hence he was undoubtedly somewhat prejudiced when entering upon these investigations. He claimed also to have discovered a straight bacillus in greater abundance than the curved, and they are observed in the specimens I received recently from Germany through Mr. T. Heinrich, Baltimore, which you are invited to examine this evening.

Mr. Watson Cheyne, in reply, said that much misconception appears to have arisen from the adoption of the phrase "comma-shaped," for it appears that the curving is but an incident of one stage in the life of the bacillus. It is at one time straight, then curved, and sometimes spiral, but, whatever its morphological change is, it exhibits invariably the same actions and characters on cultivation.

Mr. Macnamara, an eminent authority on cholera, agreed with Mr. Cheyne's statement, that what was known of the properties of cholera contagium 20 years ago corresponds with those now recognized as belonging to the comma bacillus and he has found in practice that the most appropriate treatment for cholera is that which is most obnoxious to the bacillus. Hence he accepts fully Koch's conclusions.

It is generally conceded that the results obtained by the investigations of the English Cholera Commission have, on the whole, rather confirmed Koch's views than otherwise, and the crucial test to which his doctrine has been subjected in the keen criticisms of this body of pre-eminently scientific physicians has not in the least weakened the position assumed in its promulgation. The value of this discovery is beyond estimation. For centuries vague and diverse views have prevailed regarding the cause of cholera, and the means adopted for staying its ravages have been as varied as the theories entertained. No satisfactory solution of the problem had hitherto been made, and it has remained for the acute intellect of the year 1884 to reveal the pernicious offender, and we may hope that further investigations will, in the near future, point out the best means of combating its destructive effects. Dr. Austin Flint in a recent communication in the New York *Medical Journal* on the parasitic doctrine of epidemic cholera, fully accepts the conclusions of Koch, and believes that: "We are entering upon a revolutionary period in the progress of medicine. Hereafter this present period will be cited as the commencement of an important era in medical history. The progressive advancement of our knowledge of the causes of infectious diseases will revolutionize not only ætiology and pathology but therapeutics."

From the last journals we learn that several physicians in Barcelona inoculated themselves with an attenuated cholera virus, which gave rise to a mild affection; a repetition of the experiment nine days after had no effect. Rabbits inoculated were not affected subsequently by double the dose which was found to be fatal to unprotected individuals. Later in Valencia, Spain, Dr. Ferran has inoculated over 6000 persons, some having died, the Spanish Government have prohibited further inoculations, and appointed a commission of enquiry who are now at work. As the comma bacillus has not been discovered in the blood it will be interesting to learn the method adopted by him, and what measure of protection it has afforded, if any. The principle of securing immunity against infectious diseases by inoculation with an attenuated virus may yet prove to be one of general application, but whether its adoption could become practicable is among the problems of the future.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Professor Gyn. B. C.

Ruptured Perineum.—This subject has been occupying the attention of Prof. Carstens, of Detroit Medical College, and we are indebted to him for some very important facts connected with the successful treatment of a freshly-ruptured perineum. It is well known that failure not unfrequently follows the operation when made upon the patient immediately after her accouchment. Dr. C. has observed that this failure is due to the infiltrated state of the tissues, which rapidly subsides, and leaves the sutures loose and allows the edges to separate. To overcome this difficulty the writer waits for 24 hours before introducing the sutures, and then secures the silver sutures by a compressed shot, having previously placed some 5 or 6 shots on the wire. Each day he tightens the ligature and clamps the last shot, thus securing perfect coaptation till union has taken place.

PRECOCIOUS MENSTRUATION, ETC.

Dr. Gautier, in the *Medical Abstract* for Feb., of this year, gives some interesting facts connected with hemorrhages from the genital organs in very young girls. Genital hemorrhage, he states, is not unfrequently met with in new-born children between the 1st and 9th days, generally, however, between 3rd and 6th day. The flow commences as a mucous discharge which becomes bloody, though the amount escaping (seldom exceeding 3 ii. ss.) does not weaken the child or

induce those blood changes which follow internal hemorrhages.

The cause of the hemorrhage is probably due to a catarrhal congestion of the vessels of the mucous membrane of the vulva and vagina which goes on to hemorrhage as in catarrhs of other mucous membranes.

As to treatment, having carefully examined the condition of the anus, bladder, intestines and urethra to ascertain the cause of the hemorrhage. When found to be due to enfeebled health, our attention should be directed to building up the child's health by good food, fresh air, etc., while at the same time the vulva is kept scrupulously clean, and the vagina syringed out whenever accumulations of blood or mucus exist.

Dr. G. gives the statistics of 24 cases of precocious menstruation apart from premature corporal development; of these cases 5 occurred during the first year, some of them during the first 7 days of life, the balance of the cases are about equally divided between the second year and the seventh year. In all his cases the flow was periodical and generally preceded by regular catamenial phenomena, without, however, the development of the breasts or hair over the pubes.

This form of hemorrhage is not regarded by Dr. G. as having any connection whatever with ovulation.

The Dr. then gives notes of 41 cases where there was precocious menstration with other signs of puberty; of these 41 cases 19 were met with in the 1st year of life; 9 in the 2nd year; 11 between the 2nd and 6th years. Some of these became pregnant at the 8th and 9th year. One child menstruated at the 9th month, but never became pregnant, and another case where menstruation began at 2½ years of age, became pregnant 9 times. One case where menstruation began at 2 years of age became pregnant at 8, but ceased to grow then, and never conceived again.

The author points out the fact, which it is well to bear in mind, that hemorrhage from the genitals is frequently due to tumors of these parts *e.g.*, vegetations or polypi of vagina or sarcomata. The uterus is seldom affected, while the ovaries are often diseased. These genital hemorrhages (*i. e.*, due to tumors of the genitals) seldom interfere with the regularity or amount of the menstrual flux.

Ovarian tumors, when of a dermoid nature' retard or prevent menstruation, but if of a sarcomatous nature often are accompanied by the regular uterine hemorrhages associated with precocious development of the internal and external genital organs and hypertrophy of the mammary gland.

Progress of Science.

PNEUMONIA IN YOUNG CHILDREN.

By. L. Emmett Holt, M.D., Attend Phys. to Children's Dep. of Northwestern Dispensary, New York, Instructor in N. Y. Polyclinic.

In a paper published in the *Medical Record*, Feb. 14 and 21, 1885.—Dr. Holt uses the terms lobar and broncho-pneumonia, instead of croupous and catarrhal, or lobular, to designate the two varieties; while broncho-pneumonia is the form essentially peculiar to early life, the lobar variety occurs often enough to demand a portion of our consideration.

Regarding the *seat of the disease*, the order of frequency is, first, the right apex, second, the left apex; third, the left base; fourth, the right base.

Physical signs.—Generally speaking, these do not differ essentially from those in the adult. The subcrepitant râle, is more frequent than the crepitant; in fact, the latter I have rarely heard.

It is extremely difficult, well-nigh impossible in an infant, to examine the supra- and infra-clavicular and the high axillary regions satisfactorily and thoroughly with the naked ear.

Diagnosis—Although in most cases this is easy, it presents in some very great difficulty during the first two or three days before positive signs of consolidation appear.

Practically I have found lobar pneumonia difficult to distinguish from scarlet fever, typhoid, meningitis, tonsillitis, malarial fever, pulmonary congestion, and broncho-pneumonia.

The invasion of pneumonia and scarlet fever are very similar. We must wait for the physical signs of the one or the rash of the other before pronouncing a positive opinion.

The cerebral symptoms of pneumonia are rarely so intense, so prolonged, so continuous, or so progressive as those of meningitis, although almost every individual symptom of the one may be present in the other.

The onset of malarial fever and pneumonia are very similar; both usually begin abruptly with vomiting, convulsions, or a chill; in both we have the sudden rise of temperature to from 103° to 105° F.

BRONCHO-PNEUMONIA.

By this term I understand an inflammation which affects the mucous membrane and the walls of the bronchi, the air-cells, and the interstitial tissue of the lung. The bronchial element predominates, in fact, forms the characteristic feature.

All the latest writers upon the pathology of this disease agree that we can no longer draw the line between broncho-pneumonia and that condition formerly described as capillary bronchitis.

The terms are used synonymously. This form is spoken of as generalized, diffuse, or disseminated pneumonia.

The sexes in broncho-pneumonia are about equally affected.

The clinical picture presented by broncho-pneumonia is a decided contrast to the lobar form in most of the prominent features. It is nearly always secondary; attacks children debilitated by previous disease; its onset is gradual; it rarely terminates by a crisis, and has no typical course.

When it supervenes upon an attack of bronchitis it may be so gradually that it is difficult to tell exactly when the extension took place.

Physical signs—It is upon *auscultation* that we must mainly rely in the diagnosis of this disease.

The sibilant râle is usually the first sign in the the generalized or "suffocative" cases. Vesicular breathing may be almost absent from the obstruction in the bronchi. These râles, when thus generalized, are replaced in a day or two by mucous clicks and moist râles of all sizes equally diffused. These may be the only signs during life.

Absence of vesicular breathing does not always mean hepatization. It may be due to great obstruction in the bronchi with collapse of the air-cells, or to congestion. Pure bronchial breathing, such as is heard in lobar pneumonia, does not usually exist. When it does it is combined with other signs which are found in that disease.

When a consolidated area exists in one lung the transmission of the sounds to the opposite side may be so distinct as to lead to the supposition of disease there. Percussion usually enables us to correct this mistake. In all cases the signs vary greatly from day to day, changing with the depth of the respiration, the position of the child, etc. Repeated examinations are always necessary before pronouncing positively in regard to the condition of the lungs.

How does broncho-pneumonia terminate?—Of the fatal cases the vast majority die during the acute stage. Of those who survive this period by far the greater number resolve in from three to four weeks where consolidated areas of considerable extent have been formed. In these it is necessarily much slower than in lobar pneumonia, where the inflammatory products are wholly or chiefly within the alveoli and the bronchi.

What becomes of those cases (by no means few in number) which at the end of six weeks or two months have shown little or no tendency to resolve, the physical signs remaining as they were during the height of the disease. Three answers may be given: (1.) They may become tubercular. (2.) They may terminate in chronic fibroid induration. (3.) They may recover perfectly.

First, then, in regard to *tuberculosis*. Is it common for a simple broncho-pneumonia to terminate in tuberculosis. We may, I think, safely take the ground that a case of unresolved broncho-pneumonia is extremely unlikely to develop tuberculosis, if there has been beforehand no sufficient grounds for believing the patient to be tubercular.

Secondly, fibroid induration.—The greater the duration of the disease the more marked are the changes, and the acute process may pass into a chronic one, with the production of new connective tissue. These patients may live on indefinitely.

Thirdly, complete recovery.—I use the word in a clinical sense, not in an anatomical one. By recovery I understand a condition in which the lung performs its functions normally, so far as we can judge from the patient's symptoms.

That it is possible for a lung in which consolidation from broncho-pneumonia has existed for several months to return to a condition in which no changes would be apparent under the microscope, I doubt very much. Using the term in the sense defined, I believe that the greater number of these cases ultimately recover perfectly.

Diagnosis.—Is it possible to make a diagnosis between lobar and broncho-pneumonia, and, if possible, is this of any practical value? I answer both these questions in the affirmative. In the matter of prognosis it is of very great importance.

In the vast majority of cases, the two diseases can be distinguished by the symptoms and physical signs.

Treatment.—I have not much faith in drugs in the management of pneumonia in children. I have tried most of those usually recommended very extensively, and am able to speak quite positively of what they do *not* do. Quinine and the other cinchona alkaloids, I believe, have little effect in aborting the disease, shortening its course, or in reducing the temperature.

Aconite in the very beginning of lobar pneumonia I have used considerably in very small frequent doses, and I have seen enough benefit from it to encourage me to continue in its use.

The treatment I have finally settled upon can be briefly summarized in a few words: *nourishment, opium, alcohol, local applications.*

If the child be at the breast it should be kept there, care being taken that it be not nursed too frequently.

Opium I believe to be worth more in acute pneumonia than all other drugs combined. It quiets the restlessness, relieves the pain and the cough, and perhaps more important than all, sustains the nervous system under the strain which the disease produces, and in this way seems to exercise a beneficial effect upon the inflammatory process. Of late I have used a great deal, and have come to prefer the tincture of opium and ipecac, or the liquid Dover's powder to any other preparation of opium; it may be given in drop doses at the same intervals.

Alcoholic stimulants in a large number of cases of lobar pneumonia are never needed. In broncho-pneumonia they are often required from the outset. They should be given fearlessly, but of course intelligently.

Local applications.—Poultices, unless *very carefully, intelligently*, and *conscientiously* applied are capable of doing quite as much harm as good. Their efficiency is much increased by the addition of mustard.

To promote resolution in broncho-pneumonia in addition to the usual internal remedies employed, cod-liver oil, iron, etc., I have been in the habit of keeping up a mild counter-irritation over the chest by iodine or friction with some stimulating liniment.

A LINIMENT FOR EARACHE.

Pavesi recommends a liniment composed of camphorated chloral 2½ parts, pure glycerine 16½ parts, and oil of sweet almonds 10 parts. This is to be well mixed and preserved in an hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

INDUCTION OF PREMATURE LABOR.,

By T. Gallard Thomas, M.D.,

Prof. of Gynæcology, Coll Phys. and Surgs., New York.

From a lecture published in the *Med. ad Surg. Reporter*, Feb. 14, 1885, we abstract the following:—The method of inducing premature labor which I now invariably adopt is very simple, and, at the same time, a perfectly efficient one. The patient is placed across the bed, with the buttocks resting near the edge, and under her is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub below on the floor. In this tub we put one or two gallons of water of a temperature of 98° F. The operator stands between the thighs of the patient, whose knees should be properly supported and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes.

In the course of ten minutes the os will be the size of a silver half dollar, and when dilatation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put in bed, and that is all.

This operation constitutes one of the greatest advances that have ever been made in the obstetric art, and it is certainly no mean triumph to be able thus to preserve a human life which, without its aid, would have been inevitably lost. I can point to at least two dozen children in this city, who by this means were saved from an untimely fate. When the infant has been delivered before full term, it should not be washed and otherwise treated in the ordinary manner of nurses, but should be carefully wrapped in warm cotton and allowed to remain in it; the temperature of the room in the meanwhile being brought up to nearly one hundred degrees.

ON THE TREATMENT OF THE GRAVER FORMS OF ACUTE BRONCHITIS.

By I. Burney Yeo, M.D., F.R.C.P., Physician to King's College Hospital.

We will next consider the treatment most appropriate to the graver forms of acute bronchitis: to those cases in which the catarrhal inflammation is diffused over a great extent of the bronchial mucous membrane, and affects not only the larger tubes, but those also of medium size, and sometimes even the smallest ramifications. Such cases when they occur, even in vigorous adults, are very grave and require most careful management: but when they occur, as they often do, in young children or in old and feeble persons, they are attended with the greatest danger.

When the finer bronchial tubes become attacked and their calibre is diminished by the inflammatory swelling of their lining membrane, and when many of them become blocked up by the accumulation in them of viscid secretion, you can readily understand how imminent must be the danger of death by apnœa. Let us ask ourselves what are the objects we have in view in the treatment of such cases? They are these:—(1) To diminish the inflammatory hyperæmia and swelling of the bronchial mucous membrane. (2) To thin and liquify the catarrhal secretion when it is dry and scanty. (3) To lessen it when excessive. (4) To promote its expulsion from the air passages and so obviate their obstruction. (5) To allay excessive sensibility of the bronchial mucous membrane. (6) To maintain and promote the circulation in the lung, and prevent pulmonary venous engorgement and distension of the right side of the heart. (7) To reduce fever and maintain the general strength.

The several details of treatment by which these indications may be carried out will have to be modified and adapted to individual cases. Much will necessarily depend on the age and vigor of the patient, as well as on the stage which the disease has reached when it first comes under treatment. Remedies most appropriate in the

earliest stage, and in a young and vigorous adult, might be altogether unsuited to more advanced sages, to a young child, or to an old and feeble person.

We will first consider the treatment of a severe attack of acute bronchitis in a young and robust adult seen at its onset. As in milder cases the patient's room must be kept at an equable temperature of about 65°, and the air of the apartment must be kept moist and unirritating by the free diffusion through it of the vapor water. If there is much oppression of breathing, and a sense of dryness and pain referred to the upper part of the sternum, the withdrawal of a little blood by means of a half-a-dozen leeches applied over the sternum will be a judicious measure, and with this may be associated dry cupping over the back of the chest and in the interscapular region. This measure will constantly afford much relief in robust persons when the dyspnœa and sense of oppression are severe. In most cases it will be advisable to apply large linseed and mustard poultices over the front and back and chest; and when the skin is too tender to allow of furthur counter-irritation, a hot jacket-poultice of linseed meal must be used instead.

Of internal remedies I am quite of Stoke's opinion that "there is no remedy that possesses such a decided power over acute bronchitis" as tartarised antimony; but its success depends much on its early administration: when the bronchial mucous membrane is dry and tumid, and before secretion has become abundant, and when the skin is hot and dry, and the pulse hard and frequent. It should be given in small repeatd doses, combined with other diaphoretics and with opium.

Warm alcoholic drinks must be given to keep up the force of the circulation, while, at the same time, they favor diaphoresis, reduce fever, and promote expectoration. Two or three ounces of hot milk or whey, with an equal quantity of seltzer or soda water, and a tablespoonful of brandy or whiskey should be given every three or four hours.

Free evacuation of the bowels should be regularly obtained so as to favor the descent of the diaphragm, and afford as complete expansion of the lungs in breathing as possible; and by unloading the portal system of veins, any tendency to distension of the right side of the heart is to that extent relieved.

It is necessary to insist strongly on the importance of using the greatest discretion in the administration of opium in these cases of severe diffused acute bronchial catarrh. The more diffused the catarrh, the more cautious must we be in the administration of opium. In old people and in young children opium is scarcely admissible, and even in adults, where there is much obstruction to the entrance of air into the lungs from the abundance of secretion in the air passages, opium is a very dangerous remedy. The effect of opium is to check cough and diminish secretion; the former it does by lessening the sensitiveness of the bronchial membrane, and the latter by modifying the capillary circulation in it. But in cases of "suffocative" bronchitis, while we might desire to diminish the secretion, we dare not deaden the sensitiveness of the bronchial mucous membrane, or do anything to check the cough. We depend upon the cough to clear and set free the obstructed air passages, and we only desire to make it more efficient to this end.

It is extremely important to bear this in mind with regard to the use of opium in bronchial catarrh; a dose of opium given injudiciously may produce a fatal somnolency, quiet the cough, and block up the air passages. If you give opium at all in such cases, give it only in very small doses, and only when the patient is watched by some thoroughly trustworthy person; but never give it at night to produce sleep, however trying the cough may be, or however urgent the patient or the attendant may be for a sedative.

Remember that opium is rarely ever admissible in the severe diffuse bronchial catarrhs of old persons and young children. When it is very necessary to secure a few hours' sleep, it is better to give from 5 to 20 grains of chloral, with an equal quantity of bromide of potassium or sodium. —*Medical Times and Gazette.*

WHO OWNS THE PRESCRIPTION?

This question has been asked so many times that it is now in order to set it at rest forever. The Supreme Courts of Massachusetts and of New York have ruled as follows:

"The question before the Court seems to be very simple, indeed. A patient applies to a physician and receives from him certain advice, for which he tenders a fee. The physician hands a piece of paper to the patient, purporting to be a *written order* for certain goods, called drugs, which order is filled by a merchant or apothecary. The payment of the fee, and the delivery of the goods, or drugs, terminates the verbal contract, and the druggist keeps the prescription as evidence that the *contract* has been fulfilled, as far as he is concerned. The druggist can, if he so *please*, on his own responsibility, renew the drugs, for he is but a merchant, and has a *perfect right* to sell drugs to any one and in any shape. He need not keep the prescription, nor is he bound to give a copy, but, should error occur, he has no protection in case of suit."

From this it would appear that a prescription is but an order for drugs, and the delivery of the drugs *settles the matter.*

ARTIFICIAL SEA AIR.

Many, indeed, are the luxuries that the magician's wand of invention now brings into the midst of our homes. As an instance, to produce a sea atmosphere for the sick room, a foreign contemporary suggests the use of a solution of peroxide of hydrogen (10 volumes strength) containing 1 per cent. of azonic ether, iodine to saturation, and 2.50 per cent. of sea salt. The solution placed in a steam or hand spray diffuser can be distributed in the finest spray in the sick room at the rate of two fluid ounces in a quarter of an hour. It communicates a pleasant sea odor, and is probably the best purifier of the air of the sick room ever used. It is a powerful disinfectant, the same author writes, as well as deodorizer, acting briskly on ozonized test solutions and papers. It might be well to test the subject in some ward of one of our hospitals.—*Scientific American.*

PILOCARPIN IN ERYSIPELAS.

During a recent lecture, Prof. J. M. Da Costa called the attention of the class to a new method of treating erysipelas by hypodermic injections of pilocarpin. This method, though new to the profession, has been used at various times during the last five years by Prof. Da Costa with good results. In the case presented before the class the action had been marvelous. The patient was admitted to the hospital two days before with a rapidly developing erysipelatous inflammation, due to a bruise received the previous night in a political altercation. His eyes were completely closed, his face was much swollen, red, and burning, and his temperature 102.8°. In addition, he had slept out all night exposed to the weather, and had evidently imbibed a superabundance of alcohol. It seemed to Prof. Da Costa that the chloride of iron treatment would be too slow in a case of this kind, so rapid in its progress, especially as it was one of the type in which cerebral complications are liable to occur. He accordingly ordered pilocarpin gr. 1-6, to be injected hypodermically. The result was more gratifying than had even been anticipated. In a short time profuse sweating had begun, which had lasted for an hour and a half. During the sweating the temperature fell to 99°. The further development of the inflammation was stopped. The effusion rapidly subsided, and when the patient appeared before the class there was not a trace of the disease left.—*Med. World.*

A PRACTICAL POINT IN THE TREATMENT OF PLEURAL EFFUSIONS.

Dr. Broadbent (*Lancet*), in a clinical lecture, says that when he hears a distinct bronchial breathing generally over the chest in cases of pleural effusions, he feels sure that a consolidated lung is immersed in the fluid, and he consequently does not tap unless the symptoms are so urgent as to demand interference. A solidified lung cannot, of course, expand as does one which is simply collapsed or even compressed, unless it is bound down by adhesions; and experience has shown him that on the resolution of the pneumonia the fluid is usually rapidly absorbed.

He seems to hold the sound views that with grave symptoms a pleural effusion should be withdrawn, whatever the complication; that the course of moderate effusion may often be shortened by tapping; but that, if the lung be consolidated—one evidence of which is the persistence of bronchial respiration over a whole or a large part of the chest—it is better to wait, if the condition of the patient warrants such a course.—*Boston Medical and Surgical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick-headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*N. Y. Med. Journal.*

ASTHMA.

Dr. Faulkner (Pittsburg) treats the paroxysms of asthma successfully by the application of tincture of iodine along the course of each pneumogastric nerve in the neck.—*Col. and Clin. Record.*

ABSENCE OF VAGINA, UTERUS, AND OVARIES IN AN APPARENTLY WELL-BUILT WOMAN.

In the *New York Med. Jour.* Dr. Henry J. Garrigues reports an abstract in this case. He publishes the case because it was usually said that there should be some signs pointing to such a condition in the appearance of the patient; especially that there should be a weakly, imperfect general development, absence of the mammæ, &c., but in this case there were absolutely no such signs. Even on examining the external genital organs one would have supposed the patient to be quite normally developped; it was only on searching for the vagiua that he discovered the condition described.

The case was also interesting as showing the manner of natural development of the vagina and uterus. One point which had puzzled him a little was the history of the monthly molimen, for he had been unable to find any trace of ovaries. The

patient, however, had some headache and general malaise almost constantly, and we could easily imagine that these symptoms might be increased a little every month.

The question might arise whether he was warranted in telling the patient that nothing could be done for her. Of course, if a uterus had been found, the treatment would have been to make an artificial vagina; but would it be proper to make an artificial vagina for the sole purpose of coition? He thought not; the woman would be exposed to much danger thereby. The operation itself would be dangerous, and the act of copulation in this artificial canal would expose her to constant danger.—*Med. & Surg. Reporter.*

[In this case the woman was no doubt better built than her clinical history. A woman with all the outward characteristics of her sex, but without ovaries, uterus, or vagina is a specimen heretofore unheard of. Were this case exactly as represented in the above history the views of gynæcologists regarding the relations of the sexual organs to the general organization would require to be modified. We may, however, be permitted to say that because Dr. Garrigues did not find the ovaries in a woman without a vagina is not sufficient proof that these organs did not exist.]—A. J

CHOLERA INFANTUM.

Dr. J. Lewis Smith (*N. E. Med. Monthly*): ℞. Tinct. opii, gtt. xvj.; Spts. ammon. aromat., ʒ ss. to j.; Bismuth subnitrat, ʒ ij.; Syr. simplic. ʒ ss.; Mistur. cretæ. ʒ iss. M. Sig.—One teaspoonful every two or three hours to a child of eight to twelve months, until vomiting and diarrhœa are controlled.

CHOLERA VACCINATION.

We find in *La Independencia Medica* of Barcelona, of March 1 and 11, 1885, the details of some interesting experiments by Dr. Ferran relating to the personal prevention of cholera. Dr. Ferran has been making a very exhaustive study into the natural history of the comma bacillus, and it is claimed for him, by Dr. Serenana and others of his disciples, that he has followed this microbe through all the phases of its existence, and has found it in certain periods of its evolution under forms never before described. But he has also been experimenting in the direction of the attenuation of the virus of cholera, in order, by inoculation with it, to produce a modified form of the disease which shall secure immunity for the subject from the graver scourge. It cannot be asserted that this object has as yet been obtained, nevertheless the results thus far observed are by no means such as to make the learned naturalist despair of success.

The first to submit himself to this somewhat hazardous experiment was Dr. Serenana, who, on February 23d of the present year, received an injection into each arm of half a cubic centimetre of the attenuated virus. In less than three hours, he states, he began to experience severe pain in the posterior region of the arms, which gradually increased and rendered movement of the limbs difficult. At the end of seven hours he had a slight chill, accompanied by a feeling of general languor, elevation of temperature, rapid pulse insomnia and headache. This condition remained for a little more than twenty-four hours, when there was a rapid abatement of all the symptoms, both local and general. Dr. Jacques was the second to receive the virus, and although he was injected in one arm only with half a cubic centimetre, his symptoms were even more pronounced than those of the first experimenter, and he also had slight cramps and nausea. Dr. Bertram, of Rubio, likewise submitted to the injection and experienced similar effects. An examination of the blood eighteen hours after inoculation, revealed the presence of micrococci, said by Farran to be the first form assumed by the comma bacillus when injected into the living organism.

At the expiration of nine days two of these persons submitted to a re-inoculation with negative results, while four others, who received primary inoculations with the same attenuated virus at this time, suffered from symptoms of considerable intensity. About two hours after the inoculation pain was felt in the arms, and toward evening, the injection having been practiced shortly before noon, the temperature rose, the pulse increased in frequency, there were headache, languor, slight chills, and nause. Later there was a rapid fall of temperature, and the hands and feet grew cold and presented a marbled appearance. At the same time the headache and nause increased and were accompanied by complete anorexia. Some of the subjects had also slight cramps in the calves of the legs. In about forty-eight hours all these symptoms had passed away. The highest temperature recorded was 102° F., and the pulse 125.

It must be confessed that these phenomena bear considerable resemblance to those of Asiatic cholera, and they are the more remarkable when it is remembered that an injection of the same virus, in identical dose, produced absolutely no results in two individuals who had been inoculated some days previously. These experiments must of coure be repeated many times, and in the presence of an actual epidemic of cholera, before they can be accepted as in any degree conclusive. But, if the cable reports truly, the disease has already reappeared in Spain, and Dr. Ferran will now have an opportunity to put his experiments to the crucial test. In the presence of the unsatisfactory state of cholera therapeutics we can but hope, faintly though it may be, that a second Jenner has arisen in Spain, and that we may yet see cholera relegated to the position of small-pox, as no longer a scourge to be dreaded by civilized communities. —*N. Y. Med. Record.*

A METHOD OF AVERTING SYNCOPE.

It is well that we should always be prepared to avert what may or may not prove to be a serious, or even fatal syncope. In persons whose hearts are weak, fainting or syncope is not at all uncommon, and may be produced by very slight causes. Hence we reproduce the concluding paragraph from an article on the subject by Dr. William J. Notley, in the *Lancet*, March 14, 1885:

"Now, in all cases where the syncope is not complete, and where the heart continues to act, though feebly, measures are taken to restore the patient by adopting such means as are calculated to strengthen the action of the heart and facilitate the flow of blood to the brain. In many cases a person accustomed to faint from slight causes will able to avert the syncope by adopting such means, and it is for this purpose that I wish to draw attention to the efficacy of heat applied to the head. In a person with a weak heart, syncope may be produced by simply sitting with the feet in hot water, and in like manner, it may be averted by application of heat to the head. Any one my convince himself of this by first producing faintnes in himself artificially. This may easily by done by getting into a bath of about 110° F. In a few minutes he will begin to feel faint. Let him then plunge the whole of his head except the nose and mouth beneath the surface of the water, and in less time than it has taken to bring on the faintness all the disagreable sensations will cease, and he will now be able to continue in the bath, perhaps for half an hour longer, without any inconvenience. From this it would appear that the application of heat to the head is a measure of some value in averting a threatened attack of syncope."—*Med. and Surg. Reporter.*

A NEW PROCEDURE FOR THE GOITRE.

Dr. Weiss, of Meiningen, publishes, in the *Berliner Klin. Wochenschrift*, his results of the employment of a new method for the cure of goitre, of which the following is a brief account:

The growth is lightly touched with an awl-shaped Poquelin burner which is heated to a white heat. The application is made by tracing horizontal lines from right to left, beginning above about one centimetre apart; under this another row of lines made about three centimetres long, until is the entire tumor is covered. The burnt points are soon covered by a crust, and in the course of six days there is nothing remaining but a red cicatrix The procedure, when the burner is heated to a white heat is not very painful, since it is carried out so rapidly. Few patients refuse the application without ether, even the employment of a local anæsthetic is superflous. The after-treatment is quite simple, a layer of cotton may be placed over the tumor to hinder the cloth ing from irritating. In the course of six to eight days the operation may be repeated until the tumor has disappeared. The rapidity with which this occurs is largely dependent on the size, nature and age of the tumor. It may have to be repeated from six to twelve or more times. In certain cases the conjoined administration of small doses of iodide of potassium seems to hasten the success, but in reality it is not required, since the author reports some cases where the smallest doses of the drug caused rhinitis, while the final result, nevertheless, was good. The procedure proved to be most efficient in simple endemic goitre, while the cystic growth required a longer time to disappear. In the latter class of cases Weiss is not yet prepared to say positively whether the cure was complete, since his data are too recent. If the physiological action for this treatment is asked for the only explanation that can be given at present is the suggestion that the irritation causes a contraction of the muscle walls of the vessels, which cuts off the nutrition to the hypertrophied glandular substance, which causes a gradual disappearance of the tumor. In cases even where the growth was covered by a network of enlarged veins the results of this kind of treatment was marked and rapid. Weiss has not had an opportunity of applying this method in varicose veins, but he has no doubt but what the method will bring about a rapid contraction of the much dilated vessels.

THE TREATMENT OF RINGWORM.

Alder Smith, M.B. (*British Medical Journal*), gives the following: I desire now to call attention to a treatment for recent ringworm, where it does not extend over any large extent of surface. It is not a new remedy by any means, but, I believe, a new way of naming a well-known parasiticide. I have been trying for some time to find out what vehicle penetrates most deeply in the hair follicles, and think it is chloroform. Chrysophanic acid is a very good parasiticide and, though it is insoluble in spirit and ether, yet it is soluble in chloroform. Chloroform also dissolves the fatty matter out of the hair follicles, and thus allows the parasiticide dissolved in it to penetrate deeply. During the last year I have used a solution of seven grams of the acid to the ounce of chloroform to all cases of recent ringworm and believe it is the most efficient treatment I have yet tried. The small patches should be carefully marked out by cutting the hair very closely on them and the chloroform solution should be well pressed and dabbed into the places with a minute sponge-mop for five minutes, two or three times a day, according to the amount of irritation produced. The aim of the treatment is not to produce scabs, but to get the solution to penetrate deeply. The sponge-mop should not be much larger than a big pea, and should be continually dipped into the chloroform bottle, as the solution soon evaporates, whilst it is pressed into the dis-

eased spot, and leaves the yellow acid dry on the place. Great care must be taken that the solution does not run on to the forehead or into the eyes, and that the person using it does not inhale the vapor. I always give full directions about the care necessary in using such a potent remedy; and only employ it to weak places of the disease. It is well for the nurse to keep her face away from the sponge, and to use the chloroform in a current of air, and not in a small room. The places should be well washed every morning with hot water and soap, to remove any sebaceous matter or crusts, and the hair should be kept closely cut on them till the new hair appears, which is generally in about two or three months, but the remedy should be continued till all the diseased stumps have come out.

EXTERNAL APPLICATIONS OF ETHER FOR VOMITING.

The *Paris Medical* credits Dr. Galcedan with this suggestion. In a case of obstinate vomiting during pregnancy, after every remedy had been tried in vain, he applied some ether directly to the skin of the epigastrium. The effect was surprising; the patient inspired deeply several times, and ceased vomiting at once. Whatever may be the explanation of its action, this mode of treatment is certainly worth an extended trial.—*Medical Herald.*

INCONTINENCE OF URINE.

In a lecture on diseases of children, published in the *Medical Press and Circular*, Robert Lee, M.D., draws a distinct line between that form of urine which occurs in the night and that which occurs in the daytime. He says Trousseau first pointed this out, and showed that belladona acted promptly when the incontinence occurred at night, and not so well where the trouble persisted through the day. In these cases there is a partial paralysis of the sphincter, and strychnine gives the best results.—*Louisville Med. News.*

ERGOT IN THE TREATMENT OF COUGH.

Dr. Allan (*British Med Journal*) reports fifty cases of pulmonary affections in which cough was a distressing symptom. He generally employed subcutaneous injections of ergotin. The dose is not mentioned. In most instances signal relief was obtained.—*N Y. Medical Journal.*

A NEW REMEDY FOR DIPHTHERIA.

It is to Germany that we are indebted for this efficacious and simple treatment, which consists of large doses of oleum terebinthinæ rectificatum. Different writers have highly extolled it, and ascribe to it actions which seem almost miraculous.

It would appear that scarcely half an hour after its administration a bright scarlet tint begins to encircle the diphtheritic exudation, gradually increasing in size, at length it completely envelopes and replaces the false membrane.

Authors, who have been liberal in their praise, affirm that within twenty-four hours after the ingestion of the remedy the disease has wholly disappeared, leaving hardly a trace.

The treatment, however, seems to be attended by such marvelous success and promptness of effect only when the disease is in the first stages; nevertheless, even after the disease has existed for several days, it exerts, though not as promptly, a decided curative action, and hastens the ultimate recovery. The dose, which is best given immediately after meals and in a little warm milk, ranges from a teaspoonful for children to a tablespoonful for adults, morning and evening.—*Journal de Thérap.*

A VALUABLE REMEDY FOR HEADACHE.

We desire to call attention to a simple, and at the same time wonderfully efficient, treatment for many kinds of headache. We lay no claims to originality, nor do we know who the originator was, but having used it for a year or more, and in many cases with remarkable results, we feel disposed to give it our indorsement, and desire to make it more generally known. The remedy is nothing more nor less than a solution of the bisulphide of carbon. A wide-mouth glass-stoppered bottle is half filled with cotton or fine sponge and upon this two or three drachms of the solution are poured. When occasion for its use occurs the mouth of the bottle is to be applied to the temple or as near as possible to the seat of pain, so closely that none of the volatile vapor may escape, and retained there four or five minutes or longer. For a minute or so nothing is felt, then comes a sense of tingling, which in a few minutes —three or four usually—becomes rather severe, but which subsides almost immediately if the bottle be removed, and any redness of the skin that may occur will also quickly subside. It may be reapplied, if necessary, several times in the day, and it generally acts like magic, giving immediate relief.

We believe this was the basis of a once popular nostrum. The class of headaches to which it seems especially adapted is that which may be grouped under the broad term of "nervous." Thus neuralgic, periodic and hysterial headaches are almost invariably relieved by it. True, the relief of a mere symptom is quite another thing from the removal of its cause, yet no one who has seen the distress and even agony caused by severe and frequently recurring headaches (and who has not ?)but will rejoice to be able to afford relief in so prompt and simple a manner, besides it is sure to secure the hearty gratitude of the patient

if he has suffered long. As to the *modus operandi* we have nothing more definite than a theory to offer, and that is that the vapor being absorbed through the skin produces a sedative effect upon the superficial nerves of the part to which it is applied. We know by experiment that its influence is not due to its power as a counter-irritant. We however know that it does act, and if we do not clearly see in what way it acts that it is no more than can be said of several other remedies which are firmly established in professional favor and confidence.—*Physicians and Surgeons' Investigator.*

INGROWING TOE-NAIL. DEFINITION.

A chronic, painful, traumatic inflammation of the tissues at the margin of a toe-nail. The inflamation is usually attended with the formation of granulations and with suppuration, and it is nearly always of the great toe nail, usually on its outer side. There is a form of so-called in-growing toe-nail which is not attended with suppuration, but is dependent on an accumulation of epidermic scales between the nail and the flesh; and very rarely the disease may exist in one or other of the lesser toes.

CAUSATION.—In civilized countries, we must always recognize the element of compression, or at least prevention of expansion inside a boot. It is perfectly conceivable that the condition might exist in individuals who never wear boots, but for practical purposes we must take the boots for granted. They are a constant concomitant and, if not a prime, are probably a contributing, cause. It is however, a cause which we cannot remove. We must treat the toe inside the boots. Indeed, the patient will probably have removed the cause long before we see him. Looking beyond the boots, we find that the causes may be arranged as intrinsic, or depending on peculiarities in the toe or nail, and extrinsic, or dependent on the direction of the toes or the condition of outlying structures in the foot.

1. INTRINSIC, *i.e.*, in the nail, or in the surrounding tissues, or in both.

1. *In the nail.* In some people, the nails in the fingers and toes—and I have noticed that the peculiarity is usually coincident—are convex or arched, and lie dip deeply into the surrounding flesh. In such cases, in paring the nail of the great toe, it is difficult to carry the knife or scissors completely round, and thus there is frequently left behind a small spicule or pointed piece, which readily insinuates itself into the neighboring flesh. Matters are sometimes made worse by pulling at this piece, "tearing it to the quick." The flesh swells and conceals this small piece of outlying nail; it is overlooked, sets up irritation, and the condition is developed.

2. *In the flesh.* Some people have a redundance of flesh in their toes, and their fingers as well. In these the flesh overlaps the nail, and in the foot the confinement of the boot, added to the soddening perspiration under the overlapping flesh, readily starts the condition. Once started it continues, and suppuration along the margin of such a toe may continue for years. Fortunately, it is the least painful, and most easily treated of all the varieties.

3. *In both nail and flesh.* The existence of both the above conditions—an arched toe-nail and an excess of soft tissue—will frequently be found associated with the malady. Alone, or in combination with extrinsic causes, this double condition, with the mere wearing of boots, is almost enough to cause this complaint. In this case, also, it is not likely to be severe.

2. EXTRINSIC, or from causes lying outside the nail and its surrounding tissues.

1. *Flattening of the arch of the foot.* Flatfoot, in varying degrees, I believe to be the most important cause of in-growing toe-nail, and all the more so that the ordinary modes of treatment are futile to cure it. It acts in this way through the attempt of the point of the great toe to become the anterior pillar of the arch of the foot—the natural support of the latter, viz., the pad at the root of the toes, particularly of the great toe, not being available on account of relaxation and perhaps painfulness of the plantar ligaments. But constant use of the toe in this wise induces hypertrophy of its tissues and consequent overlapping of the toe-nail. By easily understood stages this hypertrophy becomes irritation, inflammation, and suppuration where the flesh is crowded over the edges of the nail, and we thus get the condition fully developed.

It is simple flat-foot, pes planus, and not splay-foot, or pes valgus, which is most likely to start the mischief. And it has seemed to me that not the worst cases of flat foot—those which require operation—but the moderate cases, which require no special treatment for the flattening, are chiefly associated with in-growing nail.

2. *Eversion of the great toe.* The production of this condition, I believe, will be most frequently found to depend either on a habit of walking with the limb much rotated outwards, or on a congenital deflection of the toe itself. This too great proximity may merge into a passing beyond, and then we have the second toe, perhaps with the third, overriding the great toe, and evidently causing the complaint.

3. *Inversion of the lesser toes.* In this case the same result as the preceding is produced by a deviation inwards of the second and third toes. How it is produced I do not know.

TREATMENT I.—1 Where the cause is intrinsic and resident in the nail alone, it may usually be remedied by careful attention to the "toilet" of the nail, using a knife rather than a scissors, and cutting from behind forwards obliquely, so as to give the nail a pointed shape. By this means, the leaving behind of sharp portions at the margin which are insinuated into the flesh is rendered less likely. If the granulations are exuberant I

would recommend the application of a crystal or two of chromic acid, which leaves a hard, dry scab, under which the sore heals kindly. Careful trimming of the nail will usually ward off the complaint in future.

Where the cause lies in a superabundance of flesh in the toe, a condition which is usually accompanied with thin, tender skin, which perspires and chafes readily, I believe the best plan to be:

First, the application of chromic acid, if necessary, and thereafter pressure, either by strapping or by elastic. Every night the affected toe is to be surrounded tightly from the tip upwards by thin strips of adhesive plaster taken out of boiling water. This may be removed in the morning and replaced by an india-rubber cap, such as is worn over a sore finger during a *post mortem* examination. The toe is thus rendered and kept anæmic by compression; congestion is removed, and the tissues get more firm and resisting in the course of a few months.

In such cases I have sometimes noticed that the feet perspire freely, and then the wearing of fine worsted socks, the nightly use of a foot-bath, into which enough sulphuric acid has been poured to make the skin tingle, and sprinkling some powered boracic acid over the foot every morning will expedite the cure.

3. When there is a combination of malformed nail and overgrowth of flesh, a judicious combination of the methods just described will probably effect a cure. Here, if anywhere, a scraping of the nail, making it thin and yielding, ought to do good; but I am doubtful of the utility of this procedure. The nail is too firmly bound down to the matrix to yield much to lateral pressure, and constant scraping, I think, has a tendency to develop an irritative hypertrophy of the nail itself. If all these or similar plans fail there is nothing for it but removal of the nail in the manner to be described presently.

II.—1. Of intrinsic cases by far the most important is flattening of the arch of the foot, and unless this cause is clearly recognized and successfully met, our treatment will almost certainly fail. To restore the arch of the foot, probably the most scientific treatment would be to make the patient recline on his back for some weeks, and permit the stretched plantar ligaments to regain their tone. In actual practice it will be found a very efficient plan to wear a small pad of several thicknesses of chamois leather or flannel under the ball of the great toe. This pad may be put on every morning and retained in position by a collar of thread or elastic carried round the root of the great toe. The toe, thus elevated beyond the reach of harm and relieved from its illegitimate labor, soon regains its normal condition. After a few months the pad may be gradually given up, and, with care, the condition need not recur.

2. When the cause is eversion of the great toe, from whatever cause arising, the treatment is by no means easy. What I have found most satisfactory is a pad between the great and second toes, stopping short of the sore part. The pad may be constructed of several layers of flannel or chamois, and is kept in position by two collars round the root of the great and second toes respectively.

3. I have seen only three cases of the second and third toes overlapping the first, and causing in growing of its nail. In these the condition was easily remedied by wearing a double band of tape, so arranged as to keep the two offending toes turned outwards and pushed downwards. The tape was fixed in a loop round the fourth toe, passing double over the second and third toes, and then surrounded the great toe. The little apparatus is easily made by the patient.

So much for the scientific treatment of the complaint. But there is a class of cases, chiefly among hospital patients, in which imperfect intelligence and want of cleanliness nullify our efforts. Such patients have usually flat-foot, but they want to get well at once and permanently, and the endless worry of the morning pad is beyond their endurance. For all these, I remove the matrix as well as the nail, and scrape the periosteum off the bone. The operation is certain to cure permanently every case of the disease; it is a simple one, and by the exercise of a little dexterity, may be done on both feet while the patient is under the influence of nitrous oxide gas. The knife grazing the bone is carried rapidly round the flesh on the right side of the nail, and by a change of the same movement, passes under the nail down to the bone, and lifts away nail, matrix, and suppurating flesh. A piece of boracic lint is wrapped tightly round the toe, and need not be removed for a week. In the meantime the patient may get about. At the end of a week the sore will be smaller than the nail removed, for the healthy tissues have been pressed inwards over the sore In three weeks the wound is cicatrized over, and, most likely in a few weeks more a stunted nail is developed like that usually seen on the fifth toe, from which no trouble ever arises.

If the patient is not anxious to have a hand some nail on his toe, I never hesitate to let him have this mode of cure. The loss of a toe-nail, at its best, can never be a great one; and when it is ingrowing its loss is a gain.

I confidently recommend the procedure as far preferable to mere avulsion of the toe-nail, a plan of treatment which, in my opinion, ought to be abolished from surgery.—J. GREIG Smith, *British Medico-Chirurgical Journal.*

NOTES ON ASTHMA.

BY ROBERT SAUNDBY, M D.

It is to be regretted that the term Asthma is not always restricted to that form of paroxysmal

dyspnœa, which, not being associated with any organic changes in the thoracic organs, has been rightly ascribed to nervous influences. It is to this form of asthma alone that I intend to allude. Its prominent clinical features have been graphically portrayed by Trousseau; "an individual in perfect health goes to bed feeling as well as usual, and drops off quietly to sleep, but after an hour or two he is suddenly awakened by a most distressing attack of dyspnœa. He feels as though his chest were constricted and compressed, and has a sense of considerable distress; he breathes with difficulty, and his inspiration is accompanied by a laryngo-tracheal whistling sound. The dyspnœa and sense of anxiety increasing, he sits up, rests on his hands, with his arms put back, while his face is turgid, occasionally livid, red, or bluish, his eyes prominent, and his skin bedewed with perspiration. He is soon obliged to jump off his bed, and if the room in which he sleeps be not very lofty, he hastens to throw open his window in search of air. Fresh air, playing freely about him, relieves him. Yet the fit lasts one or two hours or more, and then terminates. The face recovers its natural complexion and ceases to be turgid. The urine was at first clear and passed rather frequently, now diminishes in quantity, becomes redder, and sometimes deposits a sediment. At last the patient lies down and again falls off to sleep." But these attacks are not always so transient: there are frequently some prodromata, such as a feeling of tightness at the chest for some time previous to an attack, and still more frequently there is difficulty of breathing on the following day with perhaps cough and mucous expectoration. This consecutive bronchial catarrh tends to increase, and the subjects of it often acquire a definite degree of bronchitis which may continue, especially in the winter, and is liable to be aggravated from time to time by fresh paroxysms; the following is a case in point: H. H., æt. 40, at first suffered from asthma only during the months of July and August but during the last few years he has been liable to attacks all the year round. He has recently suffered from a good deal of bronchitis in the winter. (see p. 185 *Med. Abs.*, 1884).

Such cases present the appearance of ordinary chronic bronchitis, and unless the history is inquired into the asthma would be considered to be the result of this. Such a mistake would be very unfortunate, as by overlooking the nervous element in the case, we run the risk of omitting that part of the treatment most likely to be effectual in relieving the patient's sufferings. But in typical cases the attacks present all the characteristics of a neurosis. They occur in a person in otherwise good health, and pass off in a few hours without leaving anything but the recollection of the disturbance behind. During the paroxysm, physical examination fails to detect any sufficient cause for the dyspnœa in the lungs themselves into which air enters freely. The true hindrance to the respiratory act is in the impossibility of expiration. The muscles of inspiration, especialy the diaphragm are spasmodically contracted, and it appears to be now satisfactorily dec ded that this phenomenon is the true cause of the asthmatic paroxysm. We owe this discovery to Riegel of Cologne, the author of the article on Bronchial Asthma in Ziemssen's Cyclopedia. In a recent communication he has shown that the occurrence of the paroxysm depends entirely on the influence of the phrenic nerves, which supply the diaphragm. While he confirms the statements of Williams, Paul Bert, and others, who induced convulsive dyspnœa in dogs by stimulating the vagus, he shows that when both vagi are divided the paroxysms may be produced by stimulating their centrifugal ends, while if the phrenics are divided the occurrence of the paroxysms is entirely prevented.

This serves to finally sweep away the old and always unsatisfactory theory that the dyspnœa was caused by contraction of the circular muscular fibres of the bronchi; a theory which never sufficed to explain the clinical phenomena, or corresponded with known pathological data.

The mechanism of the paroxysm being clearly established we are quite able to see how any irritant acting upon the surface of the respiratory mucous membrane may determine an attack, but it is still impossible to define the peculiar forms of irritation that can produce this disorder, still less to detect the constitutional predisposition which renders persons liable to it. For it must be at once admitted that all people who inhale hay pollen do not get hay asthma, nor do ipecacuanha powder or ordinary dust cause such attacks in persons generally, as in some specially susceptible individuals. Among the more remarkable and less common causes is the odor of flowers. Trousseau himself being susceptible to the smell of violets; and the odor of animals, especially cats! The constitutional predisposition was connected by Trousseau with gout, yet in only one of many cases of which I have notes, is there any history of this disease. Undoubtedly the predisposition is transmitted by descent, but owing to the loose way in which the word "asthma" is used we cannot attach much importance to statements to this effect made by patients. For my part, I am inclined to regard asthma as one of the rarer and major manifestations of the neurotic temperament; and I believe that it is a disorder which is yearly increasing in frequency.

Recently, I saw a young woman complaining of a persistent cold in the head, violent coryza, sneezing, and slight cough. She had asthmatic paroxysms at night, though from the slight degree of prominence given them by her in her complaints to me, we may infer that they were not very severe. Her father had suffered from "hay fever" and gout, while a paternal aunt was subject to true asthma. The exciting cause in this case appeared to be the dust from furs amongst which she was employed.

This association of coryza with asthma is most commonly seen in hay fever. The most common manifestation resembles a severe cold in the head, and the asthmatic paroxysm occurs less commonly. Doubtless both cases owe their origin to the same cause, the action of some irritant upon specially sensitive mucous surfaces. Trousseau supposed this form of coryza to be a minor manifestation of the asthmatic tendency, a sort of *petit mal* in the subjects of which you might anticipate, sooner or later, the occurrence of the major attack. Dr. Morell Mackenzie has recently drawn attention to a form of coryza very frequent in America, and which he attributes to the fine white impalpable dust which he says is so constantly present and so little regarded, in the atmosphere of a great part of the United States. Hay fever, also, is so common in the same country that there exists an American Hay Fever Association, made up of sufferers from this complaint, which meets annually to compare therapeutic observations!

I have met with several instances of this liability to severe coryza, apart from the effects of external cold, and the subjects were in every case neurotic dyspeptic persons. Now this type is, we are told, most widely spread throughout the United States, so that indeed neurasthenia is called the American disease. I am therefore inclined to believe that the liability to this form of coryza is one of the expressions of neurasthenia, and that given the presence of this condition, the exciting causes are numerous and almost omnipresent; doubtless the dust referred to by Dr. Morell Mackenzie being one.

As neurasthenia is undoubtedly on the increase in this country these considerations are not unimportant. I fear, from what I see in practice, that it is a disease not generally recognised, and with which there is too little sympathy. It is not sufficiently known that the most eminent persons are the most prone to this condition; that we find it specially amongst our intellectual classes, our statesmen, authors, teachers and the like. Such men have usually done far more than their share of work of all kinds, and have been the very life of the organisations with which they have been connected.

One of my most recent examples was a vice-president of his ward committee, many years its secretary, and foreman in his factory: a man who, left early an orphan, had worked his way up to the highest rank in his own class. Surely such men deserve something better from the profession than to be relegated to the class of incurable chronic dyspepsias, and drugged alternately with brom. pot. and rhubarb and soda, as brain or stomach respectively show signs of distress. Given such a case, every rational practitioner will see his way to devising a mode of life by which the sufferer may bring his work, diet, and exercise within the limits of a nervous system, weakened by excessive and constant use.

Climate, season, and locality play an important though obscure part in determining the incidence of asthmatic attacks. The hay-pollen theory explains the cases which are better in the town than in the country, and in the winter than in summer; but it does not explain the cases in which the reverse of this is true, or such examples as that of the twin brothers mentioned by Trousseau, who, being natives of Marseilles, could not live there on account of their asthma, yet got rid of it easily by crossing to Toulon, and never suffered from it in Paris. I know a lad who spends part of his time every year at four different houses; at two of these, in London and Wales, he is liable to attacks, while at the other two he is always free. Low-lying localities seem generally unfavorable to asthmatics, but nothing is more capricious than this disorder, exactly opposite conditions apparently suiting different cases; the city suits one, the country another; winter brings relief to this sufferer, summer to that one; fog and smoke confine one man to his bedroom, while to another they are indifferent, and to a third smoke may be positively beneficial.

The *intervals* during which the sufferer enjoys immunity vary very much. In some the paroxysms occur every night, in others at intervals of a few weeks, sometimes months may intervene. One of my patients went for two years free from an attack, without being able to assign any cause for the respite. These peculiarities are strictly parallel to the capriciousness in other respects already alluded to; and, like them, cannot receive at present any satisfactory explanation.

Is there any drug that wards off the attacks Belladonna, arsenic, lobelia, and *iodide potassium*, have each found supporters. I have given a sufficient trial to all of these, and the only one in which I have any confidence is iod. pot. Its value in this disorder has been long known, but it is not so generally appreciated as it should be. The dose required is large, ten grains three time a day, or the same amount in two doses of 15 grains each. Another drug, which certainly appears to be of use, is *sulphur*, the *balsum pectoris* of the celebrated Hoffmann. This may be given in doses of 10 or 20 grains in syrup or honey, once or twice daily.

The importance of counter-irritation is well insisted upon by Dr. Graves, he recommended the application of the linimentum terebinthinæ aceticum to the nape of the neck and the upper part of the chest and back. Some years ago I was struck by the results recorded by Dr. Faulkner, from the use of pigmentum iodi painted over the course of the pneumo-gastric nerves. In several cases I have seen this plan of essential service, and can recommend it though it has not proved in my hands a radical means of cure. The man H. H. who was suffering very much from dyspnœa used the iodiné paint and reported that he had slept all night for the first time in 12 months.

As to the *modus operandi* of this procedure we may conceive that vigorous stimulation in the cervical region would be very likely to have some

effect upon the phrenic nerve; and if we accept the most recent views, that the spasm is mainly due to contraction of the diaphragm under the influence of this nerve, counter-irritation, not necessarily "in the course of the pneumogastric," but in that region, or in the nape of the neck, as Graves suggested, seems a very rational, and proves a very satisfactory method of treating this disorder.

When there is persistent *dyspnœa*, some *bronchitis* and *cough*, a cough mixture must be given, and to the ordinary mixture of squill, senega, and ipecacuanha, I would recommend the addition of 15 drops of the fluid extract of *Grindelia Robusta* (a species of sunflower). This is one of the new American remedies which has fairly stood the test of experience, and has proved a valuable means of relieving dyspnœa.

The value of inhalations of stramonium, nitre, tobacco, etc., has been perfectly well established, and these sufferers are in the habit of seeking such remedies without consulting us. Various articles, cigarettes and pastilles, are commonly advertised. Dr. Sawyer, some little time ago, asked Messrs. Southall to analyze one of the most popular forms of these latter, and they reported it to contain approximately one part each of powdered aniseed and potassium nitrate, and two parts of powdered stramonium leaves. The hypodermic injection of morphia is strongly recommended by Dr. Steavenson, himself a sufferer from asthma, as the most effectual means of relief during the paroxysm. One of my patients who was no doubt dyspeptic, found a great deal of relief from the occasional use of an emetic, while another of his plans for treating himself was to abstain from food entirely for 24 hours.

Constipation may be present, and we may take it as a rule that torpor of the bowels always acts prejudicially on the respiratory tract. I do not think in the present day quite sufficient attention is paid to the value of purgatives in the treatment of disease. It often happens that otherwise well considered treatment fails for want of an associated purge, and in a great many conditions, as in chlorosis, purgation is an absolute essential to the success of the specific remedy employed. Moreover, we leave this matter too much in the hands of our patients and think any laxative will do. This is another very serious mistake; any laxative will not do. Each condition has its appropriate laxative, and in the one we are at present considering sulphur, otherwise indicated, is the best.—*Birm. Med. Rev.*

TREATMENT OE RINGWORM.

Alder Smith (*Brit. Med. Jour., Nov.* 1884) recommends the use of chrysophanic acid dissolved in chloroform, in the proportion of seven grains to the ounce. He says that it is the most efficient treatment that he has yet tried.—*Jour-Cut. and Ven. Dis.*

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MONTREAL, JUNE, 1885.

SMALL-POX.

For some years past Montreal has been free of small-pox. This fortunate state of freedom from a disease so terrifying might have continued for years to come but for the supineness of our authorities and their refusal to take the first case into the civic hospital. What has been the result. Misery or death to many, hundreds terrified lest they should contract it, and probably thousands prevented from visiting the city on account of the notoriety given to its existence. Judging from the medical officers' reports its spread is gradually increasing, and there is apparently no sign that we shall be free from this scourge for some time to come. The Board of Health confesses itself helpless to prevent its further spread, declares the present *abominable* hospital full, and unable to accommodate any more patients, and obliges the retention in private houses of many cases which would otherwise be quite willing to submit to isolation. So, because the Board does not see its way to expend a few hundred dollars in erecting a cheap shelter on the Hospital ground, dangerous centres must be permitted to remain. At this time of the year, and for a couple of months to come, tents might be erected, with a double cover to keep off the rain, each to contain two beds. The cost would be trifling, but the gain to the patients immense. There would be the best of ventilation, a pure atmosphere, and the period of convalescence

shortened. We recommended this plan to the Board, and thus may, they, do to others what we would prefer doing for ourselves if thus afflicted. We have already suggested in a previous issue that now is the time for our Board of Health to consider the matter in its proper bearing, and have erected pavilions suitable to meet all future contingencies. Surely the money can be afforded unless it is that our aldermen are deficient in patriotism, or that there are no printing contracts to dispose of, in looking after the city's health. All cases of small-pox, no matter who the patient may be, should be completely isolated, and this can only be done by removing them from private houses and contact with persons whose business demands their mixing with the public generally. Seriously, we cannot conscientiously advise any one to go to the present Hospital—we would not go, that is certain, and why? The answer is plain on reflection to any one who will visit its wards. Patients in all the various degrees of malignity are crowded into rooms, each having a much smaller cubic space than is necessary for persons in good health, and each is obliged to breathe the poisonous emanations of others. What, therefore, can be the chances of recovery or thorough convalescence. The Chairman of the Board of Health enjoys the confidence of the Medical Profession, is conversant with the requirements needed, and is thoroughly competent to deal with the matter, so that it might be expected that full authority would be given him to stamp the disease out. We fear, however, that he finds his position no bed of roses, and that too many obstacles are in his way to effect his purpose. There is another aspect to the question. A reasonable man might consider it quite sufficient to have all cases reported to the Board, whose duty it is to placard the house and take every precaution necessary to prevent its spread, and that the health officers' reports would be quite sufficient for the daily newspapers. Reporters, however, do not seem to be very reasonable in their selection of items, for where is the sense in the publicity that has been given to this outbreak? Indeed, if we take as a symptom the morbid matter that is constantly filling the columns of the daily press and feeding the public mind, the indication would appear that the average reader is to a great extent mentally degraded, and that the press, instead of being an educational factor, is merely carrying out the demand for sensational items. We would therefore urge upon the Board the necessity for remodeling this so-called Hospital, and to place it on such a plane that men of all conditions in life may enter its doors with confidence, and ensure safety to their families and the public generally.

SPAYING FOR UTERINE FIBROIDS.

This operation, which was first performed by Dr. Trenholme of this city, has been occupying the attention of the German Gynæcological Society, when Dr. WIEDOW (Freiburg) presented a paper upon the subject. He gave a synopsis of 63 cases which had come under his notice, among which there where twelve deaths.

Prof. Hegar had operated 21 times, with three deaths. One of these fatal cases did well for six months, when renewed bleeding and enlargement of the tumor destroyed life. The remaining 17 cases did well, being followed by cessation of the catamenia. Freud (Strassburg) reported six cases; in all favorable results were obtained, except one, where no benefit ensued. In this case the tumor was of immense size, as in one of the fatal cases operated upon by Hegar. Hegar stated that on the average he regarded the operation as less dangerous than removal of the growth, but sometimes the danger was greater; when he found a good pedicle he prefered ablation when the tumor was large. In small tumors oöphorectomy is, in his opinion, a very effectual operation. Kaltenbach (Gissen) also reported two successful operations, but at the same time stated that the menses had continued in several cases after the removal of the ovaries. HEGAR stated that cystic degeneration of large fibromas occurs even after normal cessation of menses, and the same occurs in cases after the climateric is brought about by the removal of the ovaries. For this reason he regards the prognosis in very large fibromas as doubtful.

This discussion is of great value, as affording data for the selection of cases suitable for oöphorectomy—where the tumor is very large not only is the operation dangerous and difficult, but the after-results are so uncertain that spaying would seldom be a warrantable procedure. In such, not only may cystic degeneration take place, but menstruation may continue and so nullify the result of the operation. In one case of spaying operated upon by Dr. Trenholme the menses have been quite regular and in every respect normal. This has been the case for more than six months. The future of this, one of the grandest of modern operations, would seem, as a rule, to be

limited to these cases where the fibroid is small or of moderate dimensions, and where the climateric is too far off to enable the patient to reach and safely pass that period.

THE MEDICAL SERVICE.

The following table and other information bearing on the sick and wounded volunteers in the North-West has been compiled from reports in the office of the Surgeon General at Ottawa, and, though somewhat roughly summarized, will serve to show the amount of work entailed upon the surgical staff and the excellent results so far obtained. We are indebted to the courtesy of the Surgeon-General in allowing us the privilege of seeing the reports, and also for much information so cheerfully given at all times.

The following table shows the condition of the occupants of beds at the hospital at Saskatoon on the 30th May under the charge of Dr. James Bell:

Face—
Comp. fracture of lower jaw.....convalescent.
Wound of eye and temple. " lost eye.

Chest—
Wound of right lung.....improving.

Abdomen—
Wound of left groin.....bullet still in pelvis, doing well.
Wound of right side.....convalescent.
Contused wound..... "

Back—
Wound of left back..... "
Wound of back and left chest.....empyema, doing well.
Wound of left back.....doing well.

Scrotum and perineum—
Wound of testicle.....doing well.
Wound of thigh, scrotum and testicle (Half-breed).convalescent, but loss of both testicles.

Upper arm—
Wound of right arm.....convalescent.
Wound of left arm..... "
Wound of left shoulder..severe, doing well (since been discharged).
Amputation of left arm...convalescent.
Wound of left shoulder..severe, doing well.

Forearm—
Wound of left forearm...doing well.
Wound of right elbow...improving slowly.
Wound of right wrist....convalescent (since been discharged).
Wound of right forearm..convalescent.

Hand—
Wound of left hard.....severe—probably lose hand.

Thigh—
Wound of right thigh....convalescent.
Wound of left thigh.....doing well.
Wound of right thigh.... "
" " ....not doing well, suppurating, but not in danger.
Wound of left thigh.....doing well.
" " ..... "
Comp. frac. of right thigh (Half-breed)..... .....thigh amputated—very low.

Leg—
Comp. fracture of left tibia.doing well, will probably save leg.
Wound of right leg.....convalescent.
" " ..... "

Foot—
Wound of sole of foot.... "

Large joints—
Wound of right elbow....doing well, damaged elbow (since discharged).
Wounds of right knee and left leg.....wound of knee serious to limb (since dead).

Miscellaneous—
Pneumonia..... .....convalescent.
Acute rheumatism..... "
" " ..... "
Flesh wound, left side... "

Besides the above casualties now under treatment at Saskatoon there have been many others, disposed of as follows:—Face, 1; abdomen, 1; back, 1; upper arm, 7; forearm, 6; hand, 4; thigh, 4; large joints, 1; rheumatism, 3; sciatica, 1; scald, 1—total 30, discharged to base hospital at Moosejaw, May 20th. Face, 1; chest, 1; abdomen, 1; forearm, 1; hand, 1; thigh, 1; rheumatism, 1—total, 7, discharged home. Upper arm, 2; forearm, 1; leg, 1; rheumatism, 2, discharged for duty. Neck, 1; chest, 1; thigh, 1—total 3, died.

At the battle of Cut Knife Hill, fought May 2, 1885, the casualties were:—

Killed, 8—Six being shot through the head, of whom five died in action and the other at Battleford the following day. Two were shot in the body, one dying in action, shot through the chest, and the other at Battleford on the following day.

Wounded 14—One through nose and cheek, severely, requiring removal of cheek bone two weeks subsequently. Two in the neck, both severe, one in back of neck, and in the other the bullet lodged against the spine below the level of spine of scapula, and was extracted May 20th. Two of upper arm, one of a severe flesh wound,

the other a comminuted fracture of neck of humerus, severe, and necessitating removal of a portion of the humerus May 7th. One severe flesh wound of left forearm; one shot in the back, the bullet being removed on the field; one in the right buttock, severe; one in the left side, severe; one in abdomen, bullet not found, severe; three of the thigh, two being superficial and slight, and the other severe; one superficial wound of left calf slight.

The medical staff present on the occasion consisted of Brigade Surgeon Strange of the I. S. Corps and Surgeon Lesslie of the Q.O.R., also an ambulance corps of one Sergeant and eight men of the Q.O.R., with two stretchers.

Of the twenty-six supplemental commissions offered by the British War Office to graduates of the Royal Military College at Kingston, we understand that six will be in the Royal Artillery, ten in the Engineers, and the remainder in Infantry and Cavalry Regiments.

CRANIOTOMY.

The Society of the Holy Inquisition has lately decided, in answer to a question submitted by the Archbishop of Lyons, "That craniotomy does not receive the sanction of the Church, and that in childbirth where one life must be sacrificed the life of the child must be saved, if possible, even at the expense of that of the mother." This has always been the position taken by the clergy of the Roman Catholic Church, but it is so contrary to all human ideas that but few Catholic parents would submit to such a sacrifice. We doubt very much if any intelligent physician would suggest such a course, or assume the responsibility of its performance. Medical teaching and modern public opinion are alike opposed to such mediæval doctrines.

We have received the Forty-second Annual Report of the Montreal Dispensary for the year ending April 30th, 1885. This institution is dependant chiefly upon voluntary contributions for support, but each applicant for relief is expected to give five cents. This plan was adopted by the Board to prevent undue attendance of patients, and as a means of obtaining some return for the benefits bestowed. This plan has worked very well indeed, and might be followed with advantage by other charities, as many of the applicants to such can well afford to pay something. 10,359 applications were attended to during the past year, the average cost of each patient being eleven cents.

THE LATE ALFRED JACKSON, ESQ., M.D., QUEBEC.

We regret to have to record the death of Dr. Jackson, who breathed his last on the 15th July at noon. Deceased was one of the oldest medical men in the city of Quebec. He was professor of midwifery and diseases of women and children in Laval University. He was well-known for the thoroughness of his attainments in medical science, and especially in the particular branches to which his attention was most necessarily directed; and in surgery his standing for more than a quarter of a century has been in the front rank in this part of the Province. Dr. Jackson was born in 1810 at St. Andrew's near Montreal, his father having been Artemus Jackson from Newton, Mass., and for many years a lumber merchant in the city of Quebec, dying about 1847. The family were Loyalists at the time of the war of the American colonies with the Mother Country. Deceased was educated in the city of Three Rivers, Province of Quebec, and in medicine at the University of Edinburgh, being licensed by the Royal College of Surgeons of that city in 1832-33, and returning to Canada the next year. He was one of the originators of the Medical School in Quebec, established several years before Laval University, in which institution he took his present chair, when the medical department was first opened. He was a member of the council of that university, and has been so since it was originated. He was elected member of the Literary and Historical Society of Quebec in 1837. Professor Jackson was for 22 years visiting physician to the Marine and Emigrant Hospital, Quebec, and at the time of his death held a similar connection with the Hotel Dieu Hospital. He was also Government visiting physician to the Beauport Lunatic Asylum. The Doctor was assistant surgeon to the volunteer forces in 1837-38, being in active duty nearly two years. During that exciting political period a great many troops were stationed at Quebec. In 1854 he was named the Government Joint-Commissioner to enquire into the causes leading to the introduction of cholera into Canada during that year, and drew up a long and elaborate report.

The Professor was for twenty-one years one of the Governors of the College of Physicians and Surgeons in this Province, throughout which he is well-known to the medical fraternity. In every respect his character stands high, and he had a great many warm friends. The deceased was married three times, his last wife surviving him.

PERSONAL.

Lt.-Col. D. Bergin, M.P. for Stormont and Cornwall, and Surgeon-General of the Militia, who represents the St. Lawrence and Eastern Division in the Medical Council of Ontario, has been unanimously elected President of that body for the current academic year. This is the second time he has received the distinguished honor at the hands of his colleagues, the last time he occupied the chair being in 1881 82.

Dr. G. T. Orton, M.P., Surgeon of the 90th Battalion, who was Brigade Surgeon with the troops at Batoche, has recently returned to Ottawa, to devote himself to more peaceful duties in the Legislature. His return to the Commons was the signal for an outburst of applause from those present, and the veteran Premier, who was addressing the House at the time on the Mounted Police Augmentation Bill, took the opportunity afforded him by the interruption to welcome his supporter with a neat compliment.

Dr. Corbett, of Ottawa, died recently in Winnipeg. He was attached to the Ambulance Corps of the North-West field force.

Dr. Campbell, Senior Editor of the RECORD, sailed for Europe by the Allan SS. Parisian on the 25th July. He will be absent two months.

Dr. Gaherty has resigned the chair of Anatomy in Bishop's College.

Dr. Gardner has been appointed Professor of Anatomy in Bishop's College.

Dr. Thomas J. Alloway has been appointed Gynæcologist to the Montreal Dispensary.

Dr. J. B. McConnell has been appointed Lecturer on Histology in Bishop's College.

CORRESPONDENCE.

Editor CANADIAN MEDICAL RECORD.

SIR,—The Thirty-Sixth Annual Session of the American Medical Association met at New Orleans on the 28th of April, at the Thulane Hall.

The meeting was called to order by Dr. Samuel Logan, of New Orleans. There were on the platform: Drs. N. S. Davis, nestor of A. M. A., Dr. T. G. Richardson, dean of the Medical Faculty of Louisiana, and others.

The president, Dr. Henry F. Campbell of Augusta, Georgia, then proceeded to deliver his address.

Dr. Brodie moved that a vote of thanks be tendered to Dr. Campbell for his able address, which was unanimously adopted.

Dr. Billings, U. S. A., presented his report on the arrangements for the meeting of the International Medical Congress at Washington, D.C., in 1887. Dr. Shoemaker, of Philadelphia, attacked the action of Dr. Billing's committee, of which he also was a member; he claims that the committee had exceeded its authority, had assumed powers not granted, and that certain members had ignored others, and had bargained with "new code men," and given them representation.

Dr. Billings denied emphatically that there had been any bargain or understanding with "new code men," the latter had nothing to do with the committee, which went to Copenhagen to confer with the International Medical Congress. Dr. Billings recited the history of the organization of the committee of arrangements and defended them from the charges which had been made; he spoke very highly of Dr. R. P. Howard, as one of the vice presidents; in his position, being a Canadian physician, could not be a better one and being well known to the leading professional men of Europe, United States and Canada.

Dr. Daniel, of Texas, offered a series of resolutions providing for raising a new committee to arrange for the Congress. Dr. Saunders of Tennessee moved to approve the action of the committee, as far as it goes, provided they exclude all new code men. Dr. Saunders' resolution was lost. Dr. Kelley's substitute for Dr. Daniel's resolutions was adopted: yeas 131, nays 92. The resolution, as amended, provides for raising a committee, to be composed of members elected from each state, territory and district, representing the army, navy and marine hospital service, which committee shall meet the original committee on the International Congress, and have power to review, alter or amend their action, as they may deem best.

On the third day of its Session, on the section of medicine, cholera and its treatment, by J. H.

Hollister, Chicago, the discussion on this disease was opened by Dr. Austin Flint, of New York, and the subject was discussed by other members, and myself, as a member, participated in the deliberation of the debate, when I arrived at the hall, just after the discussion, which was about to be suspended to make room for special order of the day, consequently the president allowed me half an hour to discuss my views on the cholera, in regard of the presumptious *bacillus* theory, by certain hypotheses of the day, and gave the proper treatment to control the discharges or the flowing of the white viscid secretion from the bowels in that disease.

Yours, etc.,

THIBODEAU, La. JOHN B. C. GAZZO, M.D.

REVIEWS.

The book recently written by Dr. D. W. Cathell, called "The Physician Himself," does not say a word about patients' diseases or their treatment, but does tell how to honorably get patients to treat, and also tells, in a plain business-like manner, what a physician must add to book-learning and college-wisdom in general, to make his success in life more certain, more rapid, and more complete besides telling what course professional tact and business sagacity dictate in almost every possible dilemma. The young and the old, the dull and the wise, will each find in it a feast of practical wisdom, worth many times the price of the book.

It is a large handsomely-bound octavo volume, pica type, green cloth cover, with polished red edges, about which the editor can give further information if desired.

Remit the price, $1.25, either in money or stamps, to the publishers, Cushings & Bailey, 252 W. Baltimore Street, Baltimore, Md., or almost any bookseller in the United States, and you will receive a copy of the latest edition by return mail.

PAMPHLETS RECEIVED.

Harvard University Bulletin for May, 1885. Edited by Justin Winsor, Librarian of the University.

Endometritis Fungosa: Its Pathology and Treatment. By James B. Hunter, M.D. Reprinted from the *Medical Record*.

A Comparative Review of Quarantine and Maritime Sanitation. Excerpted from the New Orleans *Medical and Surgical Journal* for June, 1885.

The Failure of Legislation in Limiting the Spread of Venereal Diseases. By E. W. Allison, M.D., and W. E. Ashton, M.D. Read before the Philadelphia County Society, April 22, 1885.

El Boletin—Medico, Tongillo, Peru, South America.

Epidemic of Typhoid Fever, at Plymouth, Pennsylvania. By Dr. E. O. Shakespeare. Philadelphia County Medical Society.

Insanity and Divorce.—The Neuropathic Conditions and Treatment of Cancer.—Mysomania. By C. H. Hughes, St. Louis, Mo. From the *Alienist and Neurologist*.

Supplement Kansas Law Journal, May 2nd, 1885: Containing the Prohibitory Law, Pharmacy Law, Dentistry Law, and Board of Health Law.

Clinical Notes on Swallowing of the Tongue. By Geo. W. Major, B.A., M.D., Montreal.

Bacterial Pathology: A Series of Papers on the Exhibits at the Biological Laboratory of the Health Exhibition, under the charge of Watson Cheyne. Illustrated.

Specialties and their Relation to the Medical Profession. By L. Duncan Bulkley, A.M., M.D., New York.

Foreign Bodies left in the Abdomen after Laparotomy. By H. P. C. Wilson, A.M., M.D. Reprint Gynecological Transactions, 1884.

Surgical Notes from the Case Book of a General Practitioner. By W. C. Will, M.D., of Sandy Hook, Conn. Reprint *New England Medical Monthly*, Aug., 1885.

Constitutional Treatment of Caries and Necrosis. By H. C. Wyman, M.D., Detroit, Michigan.

History of the Clamp Suture of the late Dr. J. Marion Sims, and why it was abandoned by the Profession. By Nathan Bozeman, M.D., New York. Reprint from Gynecological Transactions, 1884.

Transactions Medical Society of the State of Tennessee, Fifty-second Annual Meeting, 1885.

COLLEGE ANNOUNCEMENTS RECEIVED.

Atlanta Medical College, Atlanta, Georgia, 1885; Dartmouth Medical College, Hanover, N. H., 1885; Medical Department University of Buffalo; Medical College, Charleston, South Carolina; Trinity Medical School, Toronto.

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MEDICO-CHIRURGICAL SOCIETY, MONTREAL.

Stated Meeting, May 1st, 1885.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

DR. WM. GARDNER read a paper on a case of tubercular peritonitis with encysted collection of fluid, simulating ovarian cyst.

S.B., æt. 23, unmarried, domestic servant, belonging to a remote country district north of the Ottawa River, who had lived in the city during the previous six months, was sent to me about last midwinter as the suspicion of pregnancy had arisen in consequence of extensive abdominal enlargement. She admitted a pregnancy terminating at six or seven months a year and a half previous. She could give no definite account of the date at or about which the present abdominal enlargement began, but her mistress noticed it three or four months previous. It had rapidly increased since then. The girl complained of abdominal pain; menses had been absent for three or four months; general strength, health and appetite had declined, and she had become emaciated. The tongue was red.

Examination.—The belly much enlarged; the skin below the naval presenting recent pinkish striæ, as well as old silvery streaks. Well-marked fluctuation over the whole of the anterior and antero-lateral aspects of the abdomen. Dullness on percussion over the same area. In the lumbar region (flanks) and epigastrium the bowel note present. No firm or solid part to be felt anywhere. The anterior aspect of the abdomen quite uniform. The perineum slightly lacerated and the posterior vaginal wall partially prolapsed. The uterus, measuring two inches, pressed upwards and forwards, lay immediately behind the pubes. The patient was admitted to the Montreal General Hospital and kept under observation for a few days, when it was found that she had fever of septic type, the temperature at times running very high, with profuse sweating and occasional attacks of vomiting.

Operation.—The ordinary incision for ovariotomy was made, but on reaching the peritoneum no separation of parietal from visceral layer could be made; the knife entered the collection of fluid, passing through what seemed to be a thickened, closely adherent cyst wall. The fluid was amber colored, contained flakes, and in the last portions an obvious admixture of pus. The cyst wall did not collapse as the fluid escaped, but appeared to be adherent everywhere, even to the bottom of the pelvis. Acting on this view, and with the concurrence of my friend Prof. Roddick, who was assisting, I decided to make no attempt at separation of the supposed cyst, but to drain and irrigate as affording the patient the best chance. A large glass tube was passed through the wound into the Douglas pouch, and irrigation practised every two hours, night and day. At first weak carbolized water, then corrosive sublimate solutions, and finally solutions of iodine, were used for this purpose. The general condition at once improved, and this was maintained for a period of ten days. Fever diminished and appetite improved. After

a few days the reflux water during irrigation contained enormous quantities of fibrinous, flaky material. Soon, however, her condition again declined. Temperature ran high; sweats were profuse. The discharge always somewhat fœtid, became more so. Soon after the operation the patient suddenly developed a cough with expectoration, which soon became purulent, and was at times bloody. Three weeks after the operation a large rubber drainage-tube was passed through the Douglas pouch and out by the vagina, being carried a few inches beyond the vulva. This did no good. She gradually sank, and died exhausted six weeks after the operation. Two days before death she complained of sore throat, and on examination the fauces, tonsils and posterior wall of the pharynx were found to be covered with a diphtheritic membrane. Until the autopsy, I adhered to the original diagnosis of suppurating, universally adherent, ovarian cyst. Dr. R. J. B. Howard, acting pathologist to the Hospital, made the autopsy. I append his report :—"On opening abdomen a large globular mass presents, of the size of a man's head, occupying false pelvis; this and the parietes are everywhere covered by a grey, rough membrane about one-eighth of an inch hick. The transverse colon is firmly adherent to the upper surface, and is also bound tightly down to the liver. A collection of pus is found below and by the side of the spleen, and another smaller under left lobe of liver in middle line. The anterior peritoneal cavity is thus converted into a suppurating cyst, extending from liver down into true pelvis, nearly filled by the mass, which is found to consist of all the intestines, except the transverse colon, closely matted together by recent slight adhesions, which are studded with miliary tubercles. The cyst wall is apparently much older than the inter-intestinal adhesions, and looks like an unhealthy granulating membrane. The walls and viscera of true pelvis are covered by the same membrane. The great omentum has quite disappeared; but no doubt has been spread out over the intestines, and formed part of the membrane covering them. All the abdominal viscera adherent to one another and to parietes. Liver fatty; contains a few gray granulations. Kidneys contain a few gray granulations. Lungs universally adherent; abundantly studded with gray granulations. Tonsils and pharynx—surface gray and sloughy-looking. No loss of substance; same appearance involves œsophagus opposite cricoid cartilage, and about four inches lower down."

Dr. MIGNAULT, read a paper on a case of Partial Epilepsy which appeared in the June Number of the Record.

In the discussion which followed, Dr. Henry Howard took exception to the name of the paper, and said that it should be called a mild form of epilepsy. Another form was the marked epilepsy. He knew of a gentleman who has had attacks of this nature for ten years, but is not aware of the fact. He has a momentary loss of consciousness, with slight quivering of the muscles of the face. Another, a lady, has attacks which are not more severe than the aura of an ordinary epilepsy. She suddenly feels a something run up from the foot to the heart, and in a few minutes is perfectly well again. The Italians have been writing much on epilepsy. They show that cortical epilepsy, when the lesion is in the motor area, always is accompanied with convulsions, which begin in the side of the face opposite to the brain lesion. The arm is next affected, then the leg, and last the trunk. When the lesion is in the peripheral or lower centres, then there are no general convulsions. In a pure case of cortical epilepsy, there must be biting of the tongue and relaxation of the sphincters.

Dr. CAMPBELL, who has on several occasions spoken of the great benefit of nitro-glycerine in epilepsy, again mentioned his continued success with it, and related one or two cases where a wonderful change for the better has followed its administration.

Stated Meeting, May 15th, 1885.

T. J. ALLOWAY, M.D., 1st Vice-President, in the Chair.

Atmospheric Materies Morbi.—Dr. HENRY HOWARD read a paper on this subject which appeared in June number of RECORD.

Stated Meeting, May 29th, 1885.

T. J. ALLOWAY, M. D., 1st Vice-President, in the Chair.

Dr. R. J. B. HOWARD exhibited the following pathological specimens :

Atheroma of Aorta—Infarct in Spleen—Granular Kidneys.—The heart showed a moderate degree of calcification of the aortic valves, normal in other respects. Aorta showed very advanced atheroma, there being all degrees from slight yellowish sub-intimal deposit to extensive

calcification of the inner and middle coats; also many spots where the intima had been destroyed, laying bare the middle coat, which was calcified. In one place two of these "atheromatous ulcers" communicated by a passage running under the intima, admitting a pencil. The spleen had a large infarct raising the capsule, marked off from the surrounding tissue by a dense, yellow, fibrinous capsule. The substance of the infarct was of a dull reddish brown color, soft and friable, apparently structureless, and looking like a decomposing blood clot. The kidneys were a little smaller than normal. Cortex shrunken, surface typically granular, surface tough on section.

The patient had a spot of softening in the pons. This specimen was in Dr. Wilkins' possession. The condition of the aorta, etc., was not suspected during life.

Dr. WILKINS said this patient, aged about 73, came to hospital with paresis of the left side, contracted pupils and mental derangement. The muscles of the thumb of the left hand were wasted, the right less so. Five or six days before death, left-sided hemiplegia set in, which could not be accounted for at the time, but which the *post-mortem* made clear. He sliced the brain, getting nothing abnormal till the pons was reached. Here, to the left of the median line, was found a spot of softening the size of a pea, due, no doubt to a piece of fibrin from the aorta or a little plate becoming separated and carried till lodged there.

Malignant Disease of the Uterus.—Dr. HOWARD exhibited this for Dr. Armstrong. The cervix was gone; all the remaining tissues were involved, as were also the parts about the bladder. Both ureters were enormously dilated, from being blocked at the lower end. The pelves also were greatly distended. There were no signs of peritonitis.

Dr. ARMSTRONG said he saw the patient first in the beginning of January. Was sent for on account of excessive metrorrhagia. The case was easily diagnosed, and the chloride of zinc paste applied. A slough formed and came away. She got about till April 1st, when he was again sent for to stop another hemorrhage. The paste was again applied. He was sent for a third time for this trouble last Wednesday, but on arriving she was dead. A late symptom was incontinence of urine from the infiltration about the neck of the bladder and uretha. For the last five or six days no urine came away. She never suffered much. The patient's sister had just recently died of the same disease.

Dr. MCCONNELL then read a paper on "Cholera and the Comma Bacillus." (Published in July No of RECORD.)

Dr. WILKINS said that five or six weeks ago Prof. Billings brought him a test-tube containing the Asiatic cholera germs in a beef-tea and gelatine solution, also one with the cholera morbus germs. From the shaking they received both were liquified, so that their peculiar and very different behaviors could not be observed. The cholera morbus preparation was very fœtid, the other much less so.

Dr. KENNEDY suggested that, as the men about copper works were known to be rarely attacked with cholera, the salts of copper should be tried as a remedy.

Dr. Hy. HOWARD had seen three epidemics—one in Ireland and two in Canada. Each epidemic appeared to be less severe then the previous one. The salts of copper had been used in all these epidemics, but were not found of more benefit then other astringents.

Dr. A. L. SMITH asked if during the last epidemic in this city the water reservoir was then at the head of Elizabeth street, and was the water pumped up to it from the river opposite to the city?

Dr. KENNEDY said it was.

Dr. Hy. HOWARD said that 42 years ago the reservoir was a large wooded vat at the corner of Notre Dame and Bonsecours streets, the water being pumped into this from the long wharf. It was supplied by wooden pipes. There were then no water-closets in the houses.

Dr TRENHOLME said that if cholera came, he intended giving his patients large quantities of water along with spirits and camphor.

Dr. R. J. B. HOWARD said he had recently heard a discussion as to its treatment in London application of hot water to the back and abdomen, and hot alcoholic drinks with diluted sulphuric acid were strongly recommended. Enemata of carbolic acid, corrosive sublimate and nitrate of silver were said also to be of great service.

Dr. REED said that more than likely it was the acid fumes about copper works which preserved the workmen from attacks of cholera.

Stated Meeting, June 12th, 1885.

E. H. TRENHOLME, M.D., 2nd Vice-President, in the Chair.

Cancer of Rectum with Secondary Affection of Stomach.

Dr. R. J. B. HOWARD exhibited the stomach and intestines of a patient who had recently died at the Montreal General Hospital. The history of the case is as follows: James W., aged 63, had for some time had pain referred to bladder, and was sent into the hospital under Dr. Fenwick, on suspicion of having stone in the bladder. In December, 1884, he began to suffer pain over pubes, slight and limited in area, increased on lying down. This pain increased steadily in intensity, and in April last patient gave up work on this account. At this time there was frequent micturition, both day and night, but urine presented nothing unusual. He now began to lose flesh rapidly. Some three weeks before admission he had some retching, and on three occasions vomited. On admission into the hospital June 2, '85' the above symptoms were present. It was found that the stream during micturition was sometimes arrested, and that the act was attended by pain. No stone was detected in the bladder, and as the urine contained some pus, and his prostate was enlarged, he was put on treatment for cystitis. Nothing was discovered when examining prostate per rectum, except the enlargement of that gland. Two days latter he had an alarming attack of collapse, and recovering from this, symptoms of pneumonia appeared, of of which disease he died on June 9th. Before this a hard tumor was detected in the epigastrium, which was believed to be malignant disease of the pylorus, or possibly the liver. The man was much emaciated, and had a very cachectic appearance.

Necropsy.—Pneumonia of left lung and œdema. In abdomen all the glands in omentum were enlarged, some the size of a walnut, hard and firm. The gastro-colic omentum was puckered up and contained a large nodular mass. Ascending colon bent on itself, and held down by a large mass of new growth, which appeared to originate in the glands of the meso-colon. Sigmoid flexure turned up and fixed to transverse colon by another nodule of cancerous tissue, and lower down, opposite the third lumbar vertebra, adhered to a large mass formed between the layers of the mesentery. The abdominal viscera were removed *en masse*, and on further dissection an ulcerated surface the size of a man's palm was found occupying the posterior aspect of the lesser curvature of the stomach, and its wall was slightly infiltrated; the pancreas was also involved in this growth. In several other places the walls of the bowel were the seat of similar new growths, usually attacking them from without, and starting from between the layers of the mesentery. All the mesenteric and retroperitoneal glands were enlarged, firm, and evidently the seat of the same new growth. On the anterior wall of the rectum, corresponding to a mass the size of a bantam's egg, seated in wall of rectum and adherent to the bladder just above the prostate was an ulcer the size of a ten-cent piece, having raised, rolled ridges, and a somewhat depressed base. The ulcer was about four inches from anus, and no enlarged glands were found below this. Veins of prostatic plexus filled with old clot. Arteries normal. Bladder normal, with exception of enlarged prostate.

Dr. R. J. B. H. remarked that this was another of those cases where there was extensive disease of the stomach without symptoms. The original disease, without doubt commenced in the rectum, and extended upwards to the stomach through the glands. He also said that it is most unusual for malignant disease of the rectum to spread so rapidly, and from so slight a local affection to become general carcinoma. The symptoms caused by moderate enlargement of the prostate were more prominent then those caused by the extensive malignant disease.

Case of Tetany.—Dr. STEWART read a paper on this case and exhibited the patient.

A.C., aged 39, through the kindness of Dr. Mc Connell, consulted me about two months ago, complaining of diarrhœa and "spasms of the face, arms and legs." His diarrhœa began seven years ago, and has been more or less constant ever since. The spasms of the muscles of the limbs and face, which are of an intermittent character, first troubled him about five years ago. During the late American civil war he served as a private soldier throughout many of the Virginia campaigns* He had three attacks of malarial fever, and for eighteen months suffered from chronic dysentery; and it was not until he moved to the Western

* Since this report, a microscopic examination of the primary nodule shows this to have been of the nature of true scirrhus and not epithelioma.

States, after the termination of the war, that he completely recovered from it. He never had either syphilis or rheumatism; never drank to excess; worked at his trade (stone-mason) until eighteen months ago, until he was no longer able on account of gradually-increasing general weakness and the stiffness of the muscles of his hands. In 1863 he received a severe scalp wound from a sabre, which healed in a short time. The family history is unimportant.

Patient is tall, emaciated and anæmic, with an anxious and careworn expression. About once a month the muscles of his fingers, hands and arms become the seat of tonic contractions, which generally last from ten to twelve days. The thumbs become adducted and opposed, while the fingers are adducted and semi-flexed. The contractions come at times suddenly, but usually are slow in making their appearance, and gradually increase in severity day by day up to the tenth or twelfth day, when they suddenly begin to decline, the parts becoming normal in about twenty-four hours. When the spasms are what he calls severe, the adductors of the upper arms become involved, bringing the arms crossed in front of the body, the forearms being usually semi-flexed. For some hours before, and during the whole time that the tetany is present, he has a disagreeable feeling of numbness in his fingers. The dorsum of his hands swell and become very painful also during this period. The pain is especially severe when an attempt is made to move the contracted muscles. The muscles of the face are usually more or less contracted at the same time. He has a feeling as if the skin was too tightly drawn across his face. The facial muscles are also the seat of almost constant fibrillary twitchings. The muscles of the lower extremities are only occasionally the seat of spastic contractions; when they are, the feet and toes are in a state of planter flexion, the feet being turned inwards and the thighs adducted. During the existence of tetany he has diplopia.

The electrical reactions of the nerves and muscles affected are enormously increased. During the past week, while he was suffering from one of his usual attacks, contraction of the facial muscles was induced on the application of galvanism to the facial nerve by a strength of current not exceeding ·25 of a milliampere (measured by Edelmann's galvanometer), while at the present time, when his muscles are no longer rigid, the tetany having passed away, it takes 3 milliamperes to produce a similar result. There is a corresponding difference in the reactions of the radial, ulnar and median nerves.

	Normal Period	*Tetany period.*
Facial....	3.0 milliampères.	.25 milliampères.
Radial....	5.00	1.00
Median...	4.25	.50
Ulnar....	3.50	.50

Since coming under observation, the two attacks which he has suffered from have not been attended by contraction of the muscles of the lower extremities. On this account their electrical reactions have not been ascertained. Five milliamperes is sufficient to produce tetantic contraction on the shutting of the kathode (K S Te) and on opening the anode (A O Te). There is no change in the normal formula, the K S Z > A O Z. The difference in the reactions of the nerves and muscles to the induced current during the tetany and after it has passed away is not marked. In fact the interossei require a much stronger current to produce their contraction during the tetany state than during the normal condition. This is plainly owing to the œmeda of the hands during the attacks, the œdematous tissues greatly increasing the resistance. The muscles, although flabby, are in a fairly nourished condition. The patellar reflexes are greatly exaggerated during the period of tetany, while after it has passed away it is frequently impossible to produce any contraction of the quadriceps when the patellar tendons are struck. The triceps and biceps reflexes are exaggerated during the tetany period, and absent after the muscles have become normal. No ankle clonus at either period. There is nothing definite to be made out in regard to the superficial and organic reflexes.

The tongue is constantly in a raw-looking state. The appetite, however, is usually fair. He is seldom free from diarrhœa, the average number of stools in the twenty-four hours being usually about six; only very seldom is there one stool in the day. The diarrhœa always moderates when the tetany makes its appearance. The abdomen is constantly distended; stools are large, frothy, semi-fluid, and look like pea-soup. The urine is acid, but normal in quantity, specific gravity 1030; contains great excess of both urea and indican, but is free from albumen and sugar. At times he becomes deeply jaundiced. There is no further evidence, however, physical or subjective, of disease of the liver. The apex of the heart is in the normal posi-

tion. There is no increase in the cardiac dullness, neither is there in any other evidence of cardiac disease. Nothing abnormal in the respiratory system. There is no relative increase in the number of the white-blood cells; the red appear to be normal. There is no enlargement of the spleen.

Remarks.—We have here to do with a case of chronic diarrhœa of some seven years' standing, with intermittent tetany of five years' duration. Tetany is a disease which has been known for some years. First described in France by Corvisart, later and more fully by Trousseau, but it is to Weiss and Chovstok, of Vienna, and Erb, of Heidelberg, that we are indebted, in the main, for our present knowledge of it. There are three apparently distinct forms of this disease, forms which differ much in the causes which give them origin and in their prognosis, but little in the clinical pictures which they present. By far the most variety common of this disease is known as "rheumatic" or epidemic tetany.

The second variety of tetany is more chronic, and is due to either chronic diarrhœa, prolonged lactation, or other debilitating influences. The third form follows operations for removal of enlarged thyroid glands.

Clinically, these varieties differ somewhat. The so-called rheumatic form being essentially an acute affection, coming on suddenly and terminating usually inside of two weeks, the spastic periods of a few hours' duration intermitting with normal periods. Recovery nearly always occurs. The chronic form, due to debilitating agencies, differs little from the acute form except in duration. Recovery in these cases nearly always occur also. The so-called surgical variety of the disease generally makes its appearance about a week after extripation of enlarged thyroid glands, and especially when the subject has been a young female. Many of these prove fatal within a few days, while a number become permanently chronic. Early and complete recovery is very exceptional.

Judging from published observations, tetany is an extremely rare disease on this side of the Atlantic. In England it is equally rare. On the continent of Europe it is quite common, especially in France and Germany. This is true of all forms of the disease. In Vienna, not a winter passes without an epidemic of it, while cases of the chronic and surgical varieties are not at all rare. Up to May, 1883, Billroth performed 78 operations for removal of goitres, 12 of which proved fatal, 6 of these deaths being directly due to tetany. In all, there were 13 cases of tetany following the 78 operations, 6 of which ended fatal. Two of the fatal cases ran a course of upwards of one year, while the remaining four terminated within two weeks.

Pathology—There is nothing definitely known. In the very few cases where a histological examination of the nervous structures has been obtained after death, no lesion to account for the symptoms present during life could be discovered.

I have in my possession sections of the cervical cord of a young girl who died from tetany two weeks after the removal of an enlarged thyroid gland, the only noticeable change being in the finely granular protoplasm of the ganglion cells of the anterior horns; the granules being considerably larger than they normally are. A few swollen ganglion cells are also noticeable. Simply saying that tetany is due to an exaggerated excitability of the spinal gray matter means nothing. How this excitability is induced remains unanswered. On the theory that the cerebellum is the centre for continuous movements, and the cerebrum for changing movements, Dr. Hughlings Jackson has advanced the proposition that the phenomena of tetany are best explained by defective antagonism of cerebellar influences. That during the tetanic period the cerebral influences are removed.

To explain how causes, seemingly so diverse in their operation, as "rheumatic influences," diarrhœa, lactation, and operative interferences on the thyroid glands, can induce similar symptoms is very difficult. At one time it was thought that those cases following thyroid removals were due to injury of the recurrent laryngeal nerve during the operation. Cases of tetany, however, follow this operation, no matter what care may be taken in avoiding this nerve; it is therefore fair to conclude that there is no direct causative connection, especially when we take into account the fact that irritation of the recurrent laryngeal nerve from the pressure of tumors does not induce this disease. The active cause in the case reported is undoubtly the diarrhœa, but whether induced by the direct impoverishment of the nerve centres, or through the constant peripheral (intestinal) irritation, it is impossible to say. The late N. Weiss, of Vienna, considered peripheral irritation to be the cause of the disease. He believed that this gave rise to alternate waves of vessel dilatation and contraction. During the former state we

have, according to this assumption, the tetany period, while during the latter the muscles return to their normal condition. This theory might possibly explain cases like the one under observation and those following goitre removals, but it could not apply to the "rheumatic cases."

Treatment.—No medicinal agent has any power in absolutely preventing or diminishing tetany. Billroth speaks favorably of the application of ice to the cervical spine. Erb, Chovstok and Weiss look upon galvanism as the only agent of any real value. Erb believes that it considerably shortens and ameliorates the attacks. He recommends the K A to be applied to the sternum while the A N is to be applied to the diseased parts in succession, including the muscles, main nerve trunks, and the cervical portion of the spinal cord. Since this patient was exhibited to the society, an attack was apparently averted by galvanization of the radial nerves.

In the discussion which followed the reading of the paper,

Dr. Geo. Ross said he would like to ask Dr. Stewart the mode of death in the fatal cases he had seen. The disease is such a rare one in this country that he had seen but few cases.

Dr. Henry Howard, after alluding to the various disorders of the nervous system allied to tetany, said that in his opinion a more complete anatomical and physiological knowledge of the nervous system is necessary before the exact cause of these cases can be positively known; but he thought that some irritation or inflammation of the vaso-motor nervous system may account for this disease. He has strong hopes that in the near future, with the many workers and varied means of research, the cause of disease such as cancer, tetany, etc., will be found, and when recognized early, that they may be successfully treated.

Dr. Godfrey had seen several cases of tetany, or a disease like it, during the last fifteen years. Dr. Shepherd asked why it is that tetany is so much more common on the continent of Europe than in America or England, epidemics of the disease being unknown in either place, and whether tetany is more common in the dark races, as is tetanus.

Dr. R. J. B. Howard said it was remarkable that two such different diseases as myxœdema and tetany should occur so commonly after extirpation of the thyroid gland. They occur in animals as well as man. He suggested that, where possible, the isthmus only of the thyroid should be removed as in the 150 experiments of removal of the isthmus, performed on animals by Victor Horsley, none suffered from tetany.

Dr. Wilkins said that although he had never had a case of tetany, he was much interested in the disease, and thought it probably due to irritation of the peripheral nerves, as these cases always follow diarrhœa, removal of the thyroid, or some other lesion.

Dr. Stewart, in reply, said that in the fatal cases he had seen there was spastic contraction of the respiratory muscles and bronchitis. He could not tell the reason of the frequency of the disease in Europe; of course, removal of the thyroid is a very common operation there, and this would account for some of the cases, but not the epidemic form. He had seen 60 to 70 cases in the General Hospital at Vienna at one time. So frequently did this disease follow extirpation of the thyroid, that Billroth had given up operating for bronchocele, except in cases where the tumors endangered life. He was not aware of the disease being known in the West Indies, or that it is more frequent in the negro race. As to the theories advanced to explain its nature, he thought that advanced by Weiss of Vienna the most probable. Weiss looks upon the origin of the trouble as due to irritation of the sympathetic, waves of dilatation and contraction being alternately set up.

Ureometry.—Dr. Reed showed Doremus' ureometer, and illustrated the method of using it. This apparatus is very simple, consisting of one piece only—a bent tube of glass, one arm of which is graduated to represent grains per ounce of urea. The peculiarity of the instrument lies in the fact that a measured quantity of the urine to be tested is projected, by means of a nipple pipette, beyond the bend of the tube, previously filled with the usual hypobromite solution. Dr. Reed had tested it with a solution of pure urea, and found the readings correct. The price of the instrument is two dollars, and of each test under three cents. Specific gravity beads, as supplied by Parke, Davis & Co., for estimating the density of urine, were also shown and recommended, as being more convenient, simple and portable than the usual urinometers.

Stated Meeting June, 26th, 1885.

T. J. Alloway, M.D. Vice-President, in the Chair.

Dr. William Gardner read a paper on a case of extra-uterine pregnancy, successfully treated

by electricity. Mrs. ——, aged 38, married 19 years, has had four pregnancies,—all of full term, labors natural, recoveries tedious. Ever since her second labor, 16 years ago, has suffered from symptoms of uterine disease. The last child was born 9½ years ago. Since then uterine symptoms have been worse, and consisted of pelvic and lumbar pain, bearing down sensations, proper and protracted menstrual periods, and leucorrhœa. The last period, previous to the symptoms to be detailed, occurred about October 1st, 1884. On the 16 of the same month a single complete act of coitus occurred, there having been abstinence for many months previous, and in the interval before patient's illness. From the 16th October no proper menstruation, but slight discharges of bright red blood at irregular intervals. She suffered from distress after food, nausea, and occasional vomiting, and suspected that she was pregnant. On the 20th December Dr. Gurd, of Montreal, was sent for, and found her suffering from sudden intense pelvic and abdominal pain, vomiting and faintness, amounting to collapse; deadly pallor, weak pulse, normal temperature. Pain principally referred to right iliac region; next day she seemed worse, and Dr. GARDNER saw her in consultation, and on examination found decided tenderness and induration of right iliac region. No general distension of the abdomen. By the vagina the uterus retroverted and prolapsed; the vaginal portion very low, almost at vaginal orifice, slightly softened. The fundus to the left. On the right side of, and behind uterus a firm mass, closely attached to that organ. The diagnosis was hematocele. Morphia was freely given. She rapidly improved. Two or three weeks later, a similar milder attact. After an interval, a third more severe, about the end of January. The tumour on the right of the uterus had increased. Pigmentation of linea alba, areola and follicles about nipple, and to a less extent, of whole lower abdomen. The sound entered 4 inches; cavity empty. Vaginal portion remarkably soft, and swollen. Anterior lip lying in vaginal orifice. Pulsating vessels at sides of vaginal roof Extra-uterine fœtation was now strongly suspected. Doubtful points were marked hardness and absence of fluctuation or ballottement of tumour. On the other hand, in a few days, distinct bruit de souffle was heard. By the middle of February the tumour extended as high as the anterior superior spine of ilium, and an inch to the left of the middle line, and completely filled the space included within the lines mentioned and ramus of the pubes and crest of the ilium. It was now decided to use electricity. A strong faradic current, as strong as the patient could bear it, was passed through the mass to the right of the uterus. One pole, terminated by an olive-shaped insulated bulb, was passed into the rectum against the tumour. The other pole was a large wet sponge, applied over the mass in the right iliac region. The current was allowed to flow from 5 to 8 minutes, and repeated daily five or six times. The size, pain and tenderness of the tumour were at first increased, but after the third application the bruit de souffle was stilled. A few days after the cessation of the electricity, the size, pain and tenderness of the tumour was much reduced. Shortly afterwards patient began to have labor-like pains, with moderate bleeding. On the second day of these symptoms, examination showed dilation of the cervix, so that the finger easily reached the fundus and cornua of the uterus, and discovered a decidual membrane being separated. This was peeled off. The bloody discharge continued a few days longer. She now improved so rapidly that towards the end of March, at her urgent request, she was allowed to leave her bed, and go to a couch in the same room. But this was unfortunate, for the tumour now became very painful and tender, the surface over it assuming a blush, and becoming œdematous. Temperature rose to 103° Fah., and altogether her condition caused much anxiety. The question of opening and draining the supposed suppurating sac was seriously considered, but she soon began to improve in every respect, and in a few weeks was able to leave her bed. On the 15th June she was examined. She is still pale and thin, but has fair appetite and digestion. Has menstruated twice and profusely. Slight pain increased by exertion. Bladder irritable. The hypogastric tumour still present, but greatly reduced in size and tenderness. Per vaginam, all evidence point to recession of the mass. The uterus measures 3½ inches, and is much firmer.

Dr. Gardner remarked upon the great interest of the subject, an interest arising out of the supposed rarity, of the condition, the difficulty of diagnosis, or, perhaps, rather the rarity with which a diagnosis is made: a tragic and fatal termination alone revealing the true nature of the case, and the recent successful procedures adopted for its treatment.

Lawson Tait has recently secured some remark-

able successes by abdominal section, ligating, and excising the sac and its contents. His operations have, for the most part, been done in patients who were suffering from the symptoms of rupture with impending death. But Thomas, Lusk, Garrijes, and others in the United States, have had equally remarkable successes in averting such an occurrence by an agent so powerful, so manageable, and yet, as all experience shows, so harmless, as the faradic electric current, applied as in the case now related, and in many others. It is an agent within the capacity of the merest tyro in medical knowledge. Dr. J. G. Allen, of the United States, is credited with the first cases so treated. To be used to the best advantage it must be applied early before the third month, when rupture of the sac so commonly occurs. The question of diagnosis would, of course, always be most important. This might be difficult, but would rarely be impossible if, in the presence of subjective symptoms, a careful bimanual examination (under ether, if necessary) were made. Dr. Gardner offered the case as a contribution to the literature of the subject, and believed it to be the first case of the kind published in Canada.

Dr. SHEPHERD said when he saw the case there were evidences of septic trouble. Tait says all these cases are tubal at first; he cuts down and removes the fœtus.

Dr. HY. HOWARD said he had only seen one case of extra-uterine fœtation, it came to full term. The tumour was aspirated, followed in 24 hours by peritonitis, convulsions and death.

Dr. WILKINS asked how the electricity caused the death of the fœtus, was it by exciting strong contractions of the muscular structures of the fallopian tubes.

Dr. KENNEDY said that he had seen two cases of extra-uterine fœtation. One of these had been reported to the society some years ago. In this case the woman came to him about the 5th or 6th month to engage his services. Her appearence was normal, and she felt quite well, at the end of nine months he was sent for as symptoms of labor had set in; on examination of the uterus found it empty and the actual condition diagnosed.

The case was explained to the patient and operation suggested, but she and her friends positively refused such assistance. The movements of the fœtus were quite lively up to this time but ceased in a few days, and in a short time after septic fever setting in she was sent to the General Hospital. In the hospital she passed per rectum several fœtal bones, sloughing having taken place between the sac and adjacent bowel. This patient died from septic poisoning, and the post mortem confirmed the diagnosis previously made. The second case came under his notice eighteen months ago. He was asked to see in consultation a patient supposed to have pelvic cellulitis. After examining her he coincided with the family doctor in this opinion; but on a subsequent consultation he had come to the conclusion that the case was one of extra-uterine fœtation. Afterwards during the absence of his confrere he took charge of the case. The patient had been married before and had two children by her first husband. The present husband was a strong, big man with whom intercourse was generally painful. Previous to her illness she had thought herself pregnant, but the menstrual discharge had continued, somewhat altered from the usual flow. When about 3½ months in gestation, and while dusting down the stairs, she was seized with a sudden severe pain in the abdomen, which almost caused her to faint. She was prescribed opiates and rest, and after a few days was up again. About ten days after she had a second attack and later a third. The last seizure was accompanied with a profuse flow and discharge of a membrane resembling the decidua. Abortion was supposed to have occurred followed by pelvic inflammation. Although pelvic cellulitis was diagnosed, Dr. Kennedy has now no doubt that the primary condition was a case of extra-uterine fœtation; the character of the seizure and the subsequent symptoms being such as are observed in tubal pregnancy. Fortunately death of the fœtus no doubt ensued, and the subsequent inflammation had encysted its remains. This patient was a long time ill but afterwards recovered. A tumor yet remains on the right side and coitus is still painful.

Dr. TRENHOLME had met with one well marked case where the fœtus perished before its movements were felt. The patient becoming free from symptoms went to the seaside where she passed several small bones per rectum. There remained indications of induration. She has been in perfect health ever since.

Another case he was called to see, where the fœtus was as the sixth month. On examining the uterus it measured 7 or 8 in., was empty, but on the left side he found a bulging, and thought the case to be one of tubo-uterine fœtation. He scraped over

the bulged wall with a curette, and in 24 or 36 hours this was followed by expulsion of the fœtus. He thinks the electricity kills from shock not from exciting muscular contraction, as most likely the first seizure corresponded with the rupture of the tube, allowing the contents of the sack to fall into the abdomen, where there would be no muscles constricting it.

Dr. Alloway said he had read of a woman dying at the age of 75 and in whose abdomen fœtal bones were found at the post mortem examination. When 22 years of age she had had symptoms of extra-uterine pregnancy.

Dr. Gardner said that Tait found by examination that all cases were first tubal. Tait confines his operations to cases where rupture has occurred. Electricity is safe and simple to use. In this case electricity might have been used earlier. The electricity kills by shock to the child's heart.

Most cases are right sided. He believed there was not much doubt but that Dr. Kennedy's second case was one of extra-uterine pregnancy.

Dr. Gurd mentioned that their patient was doing well, being able now to take short walks.

Dr. Cameron asked if menstruation in this case had been abnormal. He had a case 8 years ago where the woman suffered greatly at each period as if from inflammation of the fallopian tubes. Might not these cases be caused by narrowing of the tube by contraction?

Dr. Gardner said this explanation was a feasible one.

Dr. Trenholme said that a cellulitis with contracting bands might destroy the potency of the tube.

Dr. Wilkins said that a chronic diseased condition might destroy the cilia of the mucous membrane of the tube, and so account for the fructified ovæ not being sent down into the uterus.

Dr. Lapthorn Smith read a short paper, entitled "Notes on Gynæcology, being some observations made during a month's visit to the Women's Hospital of New York. He began by referring to the great frequency with which the major gynæcological operations are performed, a frequency, however, which seemed to be generally justified by the results. Ovariotomies and hysterotomies were of daily occurrence, those of them which took place at the Woman's Hospital being performed in detached cottages, under the most perfect sanitary conditions. He thought, however, that they were sometimes done in the face of fearful odds against success, the consequence being that the death rate was rather high. He spoke of the skill and coolness of the operators and the splendid training of the assistants and nurses. Although the operations were not done antiseptically in the strictest sense, yet every precaution was taken to insure cleanliness. Dr. Hunter takes special care not to allow a single drop of blood to enter the peritoneal cavity when performing hysterectomy: the peritoneum not being opened until all bleeding from the incision in the abdominal wall had been arrested. When the uterine tumor had been drawn through the opening, it is immediately wrapped in a carbolized towel, in which it is held, and the edges of the wound are enfolded in warm carbolized towels. Ether was the only anæsthetic used.

The operations for lacerated cervix and lacerated perineum are performed with still greater frequency; the former being done not only for the purpose of closing the rent but still more often as a rapid method of removing the hypertrophy and inflammatory exudation of subinvolution. The operator made it a rule to be satisfied with nothing short of the complete removal of the cysts formed by the deceased nabothian glands, digging down and removing indurated tissue almost as far as the internal os. The needles used were short, round, slightly curved, and having one surface ground flat near the point, and for sutures a No. 26 pure silver wire attached to the end of a plaited silk thread was generally employed.

The operation for lacerated perinenium is also very frequently done in many cases for the cure of rectocele and displacement of the uterus. The reader stated that he frequently met with cases of prolapsus uteri in his practice, in whom the vulva was so large that no form of ring pessary could be retained; all such cases were suitable for operating.

He also remarked that in these two operations the scissors and tenaculum have completely taken the place of the knife and forceps.

Two other instruments which he found in general use were the Wylie dilator and the Thomas blunt curette, the advantages and immunity from danger he set forth at some length; nevertheless it is better to keep the patient anæsthetized. The reader then related the various uses to which the tamponnade of the vagina or columning is put to; and he stated that it has very largely taken the place of solid pessaries, especially when there is an inflammation in or about the displaced organ.

He stated that the introduction of cotton tampons soaked in glycerine or glycerine of tannin and the use of the hot water douche have marked a new era in the treatment of pelvic cellulites, subinvolution of the uterus and the inflammatory affections of the generative organs.

He concluded by describing a case under Emmet's care, in which that distinguished operator had intentionally made a vesico vaginal fistula for the cure of chronic cystitis which had been otherwise intractable. After three or four months the cystitis was cured and he closed the fistula without much difficulty.

Progress of Science.

THE GULSTONIAN LECTURES ON MALIGNANT ENDOCARDITIS.

In the *British Medical Journal* of March 7, 14 and 21 are found the Gulstonian Lectures delivered by Prof. William Osler, of the University of Pennsylvania. These lectures give the most complete exposition of the subject of ulcerative endocarditis, or, as he prefers to call it, malignant endocarditis, which has yet been made.

There may be an acute or a chronic form. Anatomically, the acute form may be subdivided into various forms, as the plastic, papillary, verrucose, fungous, ulcerative, etc.; etiologically, the varieties are as numerous as the diseases in which it occurs, as puerperal, scarlatinal and the like; clinically, we have two classes, the simple and the grave. Cases are said to be primary or secondary, but there can be found to exist no essential anatomical or pathological differences. Anatomical classification would group together cases widely different, clinically. The term ulcerative is in general use, but does not include those cases where no actual destruction of tissue has taken place, and yet manifest severe constitutional disturbance. The clinical classification into simple and malignant cases, whether ulcerative or vegetative, is the one of most practical value.

Malignant endocarditis occurs as: 1. A primary disease of the lining membrane, rather predisposed to by constitutional debility or previous valvular disease; 2. A secondary affection to many diseases, especially rheumatic fever, pneumonia, scarlet fever, diphtheria, ague; 3. An associated condition in septic processes, traumatic or puerperal. The lecturer then discusses in order the anatomical, the clinical, and, lastly, the etiological and pathological characters of the disease.

The lesions, by no means uniform, may be vegetative, ulcerative or suppurative, either alone or in combination, and in all degrees of intensity. He relates a case which proved fatal, the endocardium showing simply vegetations without ulceration. The combination of ulcerative and fungating outgrowths he thinks the most common condition. The ulceration may vary from simple abrasion to destruction of a valve or deep involvement of the muscular substance. The vegetations vary considerable in appearance and consistence, from soft, greyish-white masses to large cauliflower excrescences, with deep jagged fissures, or long pendulous, stalactitic masses. The friction of these masses against the wall may produce numerous smaller vegetations. Conservative changes may take place; fibroid induration of the deeper parts, the superficial remaining unchanged or necrotic. Two conditions are to be distinguished from malignant endocarditis, namely, atheromatous degeneration in sclerotic valves, and the firm, white globular thrombi of the auricular appendices and of the interstices of the columnæ carneæ of the ventricles.

Histologically, fresh endocardial vegetations are made up of round and fusiform cells derived from the sub-endothelial layer. Varying with the rapidity of the growth the mass will resemble granulation-tissue or a fibrous outgrowth. Sometimes a cap of fibrin is deposited on the growth and in this are found, more or less abundantly, the blood plates of Bizzozero.

The larger vegetations consists of a granular material, composed of altered and dead tissue elements, fibrinous exudation and colonies of micrococci. He regards the micrococci as constant elements in these vegetations. They vary greatly in number and arrangement, occurring singly or in groups, most abundant in the deeper layers. Some of the smaller vegetations seem almost exclusively made up of them. Klebs has distinguished two forms, one, found in septic, the other, in rheumatic cases. Small elongated bacilli have also been found, and Cornil, having found the bacillus tuberculosis in endocardial vegetations in a case of phthisis, expresses the opinion that we shall, before long have accurate knowledge of a variety of micro-organisms in endocarditis, depending upon the nature of the primary disease.

The local effects of the ulcerative changes are important. Perforation of a valve-segment is extremely common, the hole being clean-cut or irregular, or sometimes great fungous vegetations may completely close and conceal the perforation. Erosion of the chordæ, ulceration of the heart-muscle, leading to perforation of the septum or of the wall of a chamber, the production of aneurisms of the heart or vessels, are some of the effects.

Sclerotic or malformed valves are especially prone to acute inflammation and fusion of two aortic cusps is nearly always followed by sclerotic changes.

Of associated pathological changes we have, first, those connected with the primary disease, and, second, those resulting from embolism. These

latter may be divided into " those without embolic processes, cases in which the infarcts are simple, not suppurative, those in which there are innumerable suppurative infarcts, " and mixed cases. In marked malignant cases these embolic features may be absent. They may not be suppurative, but simply hæmorrhagic, though in traumatic and puerperal cases the infarcts are invariably septic. The spleen is most often the seat of infection, then the kidneys. The lungs are usually affected when the right side of the heart is involved. These infarcts may be found also all along the gastro-intestinal tracts, forming in some instances numerous miliary abscesses. Gastric ulcer has resulted in this manner. The liver may be similarly affected, and pleurisy and pericarditis are not uncommon complications. The cerebral lesions may be meningeal or of the brain substance, manifested by meningitis or various paralyses.

It would be difficult to present a satisfactory clinical picture of this disease. The general symptoms are those of a febrile affection of variable intensity, " ushered in with rigors, pain in the back, vomiting, headache, etc. Prostration, delirium, sweating and other signs of severe constitutional disturbance are generally present. Arising in the course of some other disease, the symptomatology partakes of that of the primary affection, additional symptoms and signs manifesting themselves, owing to the local cardiac implication and its results.

So diverse are the features of malignant endocarditis that Dr. Osler has attempted to arrange them into groups. In the first group are placed those cases in which the endocarditis is merely a part of a septic or pyæmic state, resulting from an external wound, a puerperal process, or an acute necrosis, about 18 per cent. of the doctor's cases being of this nature; the septic cases do not strictly come within the province of the physician, but must be taken into account in a description of the disease. These cases arise through the venous system.

In the pyæmic cases, the clinical features are of a decided pyæmic type, the metastatic lesions are in the territory of the arterial system and have their source in the heart. Two varieties of these cases may be made out: 1. Those of ordinary pyæmic type; 2. Those marked by a singularly regular intermittency of the pyrexia. The cases may resemble so closely cases of quotidian or tertian ague as to make it almost impossible without a necropsy to differentiate, though the absolute failure of quinine may cause one to question the diagnosis of malarial trouble. The typhoid type is, however, by far the most common. The main feature is the irregular character of the fever, but sometimes the cardiac affection being masked, the course of temperature may so simulate typhoid as to make diagnosis difficult, except after death.

In the second group are placed the cardiac cases that is, those occurring in patients the subject of valve-disease, who suddenly show evidence of fresh endocarditis, accompanied by febrile symptoms. These cases may present features of the pyæmic, typhoid or cerebral types, in some may be intensely acute, in others mild and chronic In the third group are the cerebral cases, in which the earliest observed symptoms, or the most marked, are cerebral or cerebro-spinal. Some are first seen in coma, or the symptoms may be those of meningitis.

The course of endocarditis presents many variations, some cases running their course in a week, others lasting even two or three months, though rarely prolonged beyond four or five weeks.

As regards diagnosis, this is frequently so difficult that many skillful diagnosticians have been unable to discover the trouble until *post mortem*. In the group of cardiac cases, the diagnosis is easy enough, the irregular type of fever taken with the physical signs being sufficient, but in other cases, the cardiac affection not being apparent, it may, be difficult to differentiate from quotidian or tertian, intermittent, from typhoid, typhus, cerebro-spinal meningitis or even hæmorrhagic small-pox. In pyæmic cases, the diagnosis must be made between ordinary septic infection from a wound and auto-infection from a primary endocardial inflammation.

In determining the etiological relations of malignant endocarditis, Dr. Osler has gone over the records of 209 cases. 37 of these occurred in connection with traumatic and puerperal pyæmia, in 45 no record of previous disease, in 127 cases there was a possible connection with past or existing disease. Middle life gives the greatest number of cases, young children being rarely victims; of 160 cases (exclusive of traumatic and puerperal), 99 were males, 61 females. Debility and addiction to drink predispose; sclerotic valvulitis is a very important etiological factor. Of the 127 cases, secondary to other disease, in 53 there was a history of rheumatism, past or present, in 54 the attack was associated with pneumonia, diphtheria was rarely associated, with dysentery a few cases, in the eruptive fevers a few cases, and even in the course of malarial fever a few cases have developed.

With regard to pathology, Dr. Osler speaks with due caution, not allowing himself to be carried away by the attractiveness of the theory. Accepting as a plausible explanation the mycotic pathology of malignant endocarditis, he yet feels hesitation in urging it. We do not yet know with sufficient accuracy the frequency of occurrence of the microbes in the disease, we want to know the varieties of microbes in secondary endocarditis and their relation to those of the primary disease; and, thirdly, we are only on the threshold of inquiries concerning the culture of these organisms, the microscopic characters of their growth and the possible experimental production of endocarditis. *New Orleans Medical Journal.*

CALOMEL IN THE TREATMENT OF OTORRHŒA.

Dr. J. Gottstein, in the *Archires of Otology*, September to December, 1884, strongly recommends the use of calomel in the treatment of otorrhœa. He says: During the past year I have used the calomel by way of trial in a number of cases that have seemed suitable, especially such as could be submitted to daily observation.

I have satisfied myself (1) that the remedy is absolutely free from irritation to the mucous membrane of the middle ear; (2) that it forms neither upon nor in the mucous membrane any precipitate difficult of removal; (3) that surprising results are often obtained under its use.

Accordingly, since the beginning of the present year, I have, in my private practice as well as in my polyclinic, employed calomel in the treatment of all cases of otorrhœa in which, following Bezold's direction, I had previously made use of boric acid alone, or as a supplementary means. I withheld the calomel only from such patients as, coming from a distance, I had an opportunity to see but once.

My observations now exceed eighty in number, so that I feel justified in communicating the results of my experience with this method.

My method of procedure is as follows: The ear is, in the usual way, syringed carefully with a weak sublimate solution (one-tenth per cent.); the residue of the secretion is forced into the external meatus by the employment of Politzer's method, and then removed by syringing; and, finally, the ear well is dried with cotton.

The calomel (vapore parat.) is then blown in hrough a powder-blower,* and the auditory canal closed as well as possible by means of cotton. The further treatment is the same as with the boric acid.

That on which I lay the most stress is that calomel, in my opinion, has a much more certain and decided antiseptic action than the boric acid.

I am anxious to avoid the error into which those authors fall who over-estimate the value of the remedies recommended by them. Calomel also fails in some of the cases in which powerful antiseptic action is desired, because considerable tissue alterations in the drum cavity are absent. Yet I have, with no method of treatment, not even with the boric acid, attained such speedy results as with this remedy in acute as well as in chronic forms of otorrhœa.

The calomel is also suitable, as is the boric acid, for employment after operations in the middle ear, cauterization with nitrate of silver, the use of the galvano-cautery and in conjuntion with the alcohol treatment. In these cases, the powerful antiseptic action of the remedy is conspicuous.

*In my consultation hours I make use of the powder-blower of Kabierski (*Centralblatt für Chirurgie* 1883, No. 33), which I have found, after long trial, the most suitable for the treatment of the ear as well as of the nose and larynx.

It has the advantage that it does not need to be filled for each case, that the insufflation can be made with ease and accuracy during the examination of the parts, and, finally a separate tip can be used for each patient, a measure necessary for the attainment of a thorough antisepsis.

INCONTINENCE OF URINE IN CHILDHOOD.

Dr. Eustace Smith, in his recent work on children, gives the following: ℞ Tr. belladon., f ʒ j; potas bro m.; gr. x; infus. digitalis, f ʒ i j; aq q. s. ad. f ℥ ss. M. This is one dose.

He adds strychnia when the affection occurs both day and night. This author finds a great tolerance of belladonna in children, and believes that it should be pushed to its toxic effect when the case does not yield readily.—*Medical Bulletin.*

Prof. S. W. Gross says it is a mistake to apply a poultice to an acute abscess after its contents have been evacuated. The endeavor should be to prevent and not to encourage the further formation of pus. To do this the cavity of the abscess should be syringed out with a 1 to 1000 solution of mercuric bichloride, and the walls brought together by compresses and bandage, and union allowed to take place by granulation. If the abscess be of large size a drainage tube should be left in for a couple of days until the serious oozing has been reduced to a minimum. The tube should then be taken out and the walls brought close together. If the healing process he delayed by the development of flabby œdematous granulations they can be stimulated to healthy action by the injection of a three per cent. solution of car bolic acid or the application of chloride of zinc gr. iij., aqua ʒ j.—*Med. Bulletin.*

THE TREATMENT OF CARBUNCLE WITHOUT INCISION.

In the course of the paper on this subject before the American Medical Association, by Dr. L. Duncan Bulkley (*Med. News*, May 9, 1885), the author related the case of a gentleman, aged 56, large and florid, who suffered for several years with eczema of the left foot. He was also diabetic. Following upon this eruption was a large carbuncle. He applied to this tumor, thickly spread on the woolen side of lint, the following ointment:

R.	Ergot. fl. ext.,	ʒ ij
	Zinci oxidi,	℥ ss
	Unguent. aq. rosæ,	℥ ij.

Covering this was cotton-batting, to prevent blows or injury. He was given sulphite of calcium ¼ gr. every two hours, and occasionally the following:

R.	Magnesiæ sulphat.,	ʒ iv
	Ferri sulphat.,	ʒ j
	Acid. sulphurici dil.,	ʒ iij
	Syr. zingiber,	℥ j
	Aquæ,	ad. ʒ iij, M.

S.—Teaspoonful in water through a tube three times daily.

At bedtime Dover's powder was administered, to give rest when required. The result of the treatment was cessation of pain, rapid resolution, and a cure, except some induration, in eighteen days. The man continued at his work.

He summed up his paper as follows :

1. Avoid any irritation, as pressure, blows, etc.
2. Avoid warmth and moisture, as in poultices.
3. Avoid incisions.
4. Do not use stimulants.
5. Protect the inflamed parts with the ointment given above. The solid extract of ergot may be used if desired. Spread the ointment at least one-third inch thick.
6. Use sulphite of calcium every two hours for its effect upon suppuration.
7. Employ good, nutritious food, and fresh air.
8. A sedative, if desired, and occasionally the laxative and refrigerant tonic as above.

The advantages are :

1. Short time required for recovery.
2. Cessation of pain.
3. No scar.
4. No operation.
5. No detention from business.

In the early treatment of gonorrhœa, Prof. Gross condemns the use of injections. His plan is as follows : If possible, put the patient to bed; give him at the outside a purge, by administering Epsom and Rochelle salts, each 2 drachms, in lemon syrup. Allow no meat or any stimulating articles of diet, etc. Malt liquors do more harm than alcoholic, so interdict both. No tea or coffee, but give him milk, eggs and some oysters, etc. Three times daily he is to hold the penis in a cup of hot water—quite hot. Keep the organ there for five minutes at a time, then wipe it gently each time.

The internal treatment will be by the "antimonial and saline mixture" :

R. Antimonii et potassii tartrat,	1-10 grains.	
Magnesii sulphatis,	2 scruples.	
Morphiæ sulphatis,	1-16 grain.	
Tinct. aconiti radicis,	1 drop.	
Liquor potassii citrat.,	½ drachm.	
Olei limonis,	½ drop.	
Elixir. simplicis,	½ ounce.	M.

Sig.—Ter die.

By this treatment the urine will be rendered bland and unirritating. Should the urine persist in "scalding," then add to the above prescription 10 drops tinct. cannabis indicæ. To prevent or cure chordee, order at night a suppository of—

R. Extrat. opii,		
Camphoræ,	*aa* 3 grains.	

In the course of four or five days the discharge from the urethra will look more like laudable pus ; then order an injection :

R. Hydrargyri chloridi corrosivi,	2 grains.	
Aquæ destillat.,	1 pint.	

Sig.—With a syringe that holds an ounce, inject into the urethra—having first "flushed" the canal several times by voiding urine—and retain the fluid for five minutes.

Internally, a useful combination is that used at the out-door department of the hospital, and consisting of—

R. Cubebæ,	2 ounces.	
Alum. pulv.,	1 drachm.	

Sig.—Of this take a heaping teaspoonful in a tumbler of water ter die ; the dose to be increased.

Should the discharge per urethram still persist, use an injection of—

R. Liquor. plumbi subacetatis,	1 drachm.	
Aquæ,	10 ounces.	M.
Or—		
R. Plumbi acetatis,	2 grains.	
Zinci sulphat,	3 grains.	
Aquæ,	1 ounce.	M.
Or—		
R. Acidi tannici,	2 grains.	
Aquæ,	1 ounce.	M.

As an application to bed-sores, Prof. Bartholow recommends : Alum, ½ ounce ; whites of four eggs, and tincture of camphor, 1 ½ ounce.

THE TREATMENT OF PNEUMONIA.*

By William Gilchrist Burnie, M.D.

During the last thirty years a great change has taken place in the opinion of the profession with regard to the treatment of pneumonia. I believe we have arrived at more correct notions in the matter of this important disease than formerly obtained. Our precursors were more remarkable than we are for treating diseases heroically, for giving them battle, for knocking them down. We do not object to the process, provided it be attended with no collateral or ulterior mischief greater than the evil overcome. Inflammation, of which so much used to be heard, and of which comparatively so little is heard now, used to be a frightful bugbear. The practitioner's mental eye was riveted on that dire symptom, and other conditions present, and especially prospective, were consequently apt to be overlooked or not anticipated. I remember long ago a young enthusiast exclaiming, "Inflammation of the lungs!—why should we allow inflammation of the lungs to get the better of us? Can't we drain every drop of blood out of the lungs rather than be beaten?" Other *desiderata* were here evidently overlooked, and notably the main object, the preservation of the life of the patient. My friend but represented

*Read before the Bradford Medico-Chirurgical Society, March 3.

in an exaggerated manner—caricatured—the opinion of the day—he was influenced by what he had been taught. Terrible thing this teaching—this education! It is wonderful and dreadful what we may be taught to believe and to act upon.

About fifty years ago a Cyclopedia of Practical Medicine was published by Drs. Forbes, Tweedie and Conolly. This work then represented the opinions of the profession as much as the Reynolds' the Quains, and the Ziemssens do now. I find in the Cyclopedia published in 1834 the following observations on the treatment of pneumonia:

"Cullen advises that blood be drawn either until there be remission of the pain and relief of the respiration, or if these do not appear until symptoms of commencing syncope come on. This, we believe, is the plan most commonly pursued in this country, and at this first bleeding a quantity varying from 16 to 40 oz. of blood may be taken before either of these effects is produced. By some practitioners a much larger quantity has been taken without producing syncope, even to the amount of 70 or 80 ounces; but we consider it doubtful whether it is ever advisable to exceed the highest quantity before stated. Cullen observes that a first bleeding, however large, will seldom prove a cure of the disease; and as the pain and other symptoms recur, the measure must be repeated, even in the course of the same day, to as full an extent as before; and although its greatest efficacy is in the first three days, this recurrence will make a repetition of the measure proper at any period of the disease, especially within the first fortnight. With this practice may be contrasted that of many Continental physicians, who never take more than twelve or sixteen ounces daily, and limit the bleeding to the first two or three days, under the apprehension that larger and later depletions interfere with the natural crisis of the disease."

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"It is a satisfactory proof of the superiority of the English method of practice to find that the best authorities in France now advocate free depletions much more than formerly. Andral and Chomel recommend blood-letting to sixteen or twenty ounces, practised, if necessary, two or three times a day, the first days of the disease, and more moderately afterwards. Some of their countrymen still more recently have prescribed two or three pounds to be drawn every twelve hours at the commencement of the inflammation, and if the dyspnœa continues, eight or twelve ounces daily afterwards."

* * * *

"Expectant medicine is both irrational and dangerous."

I need not pursue the article; it goes on at considerable length to discuss the methods of this extensive depletion. It goes on to discuss how best to produce a feeling of faintness in the patient—the effect of opening two veins at once—bleeding in the semi-erect posture—how "nervous constitutions and those liable to palpitations and fainting fits must be coaxed gradually to bear a full depletion."

"Many things have happened since then!" We have travelled a long way. Fifty years after these words were published we have in "Quain's Dictionary of Medicine:"

"The heroic methods of treatment (of pneumonia) by venesection, tartar emetic, &c., so much in vogue in the past, had for their object the controlling or cutting short of a local affection of the lung; hence the unfavorable results which attended them. As these methods have been abandoned, and there has existed a more correct appreciation of the pathology of the disease, the mortality attending it has diminished."

To explain the diversity some (and among them learned professors) have proclaimed an alteration in the human constitution, or that the disease has changed its type. I remember seeing a hale old woman of 93, and she told me seriously that the climate was altered since her youth—that the seasons were now much colder than they used to be. We smile at the old lady, otherwise shrewd, being blinded to the real cause of her feeling; but is not the change of type doctrine on a par with her notion. If it is said the change of type is in the disease and not in the patients, the belief is equally ridiculous.

We flatter ourselves that the change is to be accounted for by our superior knowledge and by the advance of physiological and pathological science. Changes in the management of disease must first be suggested by physiology and pathology, but the results must be the criterion; for these branches of knowledge cannot be accurate enough to be infallible. There exist so many possibilities of oversights and of unknown conflicting and disturbing circumstances that physiological reasonings about the treatment of disease must stand the test of experiment—must only be accepted *à posteriori*.

I do not suppose that we have arrived at the most correct treatment of pneumonia—certainly not of many other diseases. The last fashion (as with the women) is always the most captivating. Still, I do think there has of late years been a rational and defensible change in the treatment of pneumonia. At the same time, the swing of the pendulum may have carried us a little too far, and may have made us neglect many useful practical facts in vogue among our predecessors. The complete setting aside of blood-letting in pneumonia and in some other diseases is a case in point. No doubt blood-letting was carried to a ridiculous—to an injurious extent—was accredited with benefits which it never conferred, and failed to get deserved discredit for great evils that it brought about. But I have no doubt that much mischief is now often done by the omission of that potent remedy—especially when it is required for

the relief of cardiac and respiratory distress—from urgent pectoral embarrassment.

Take an ordinary case of acute pneumonia—take that of a man of thirty-five. The disease is more common, by-the-by, in the male sex. Let the patient be fairly developed and of average weight and strength. He has a pulse of 105. He has 35 respirations in the minute. He is hot (temp. say 103 deg.) He is anxious. His breathing is shallow. He has a pain in the side (say the right one, as that is more usually affected than the left). He has been forty-eight hours ill when you were called in. The short period of *malaise* had been overlooked. You were sent for when he got into difficulties (as usual). What would you do? Bleed? No. And yet the medical man attending your grandfather would have been looked on as a homicide if he had not flourished his lancet and abstracted some thirty or forty ounces of blood. Give him antimony? Well, not in the poisonous doses that used to be frequent. Antimony, however, is a valuable depressant in robust constitutions and in small doses, acting on the skin and relieving by diaphoresis, might not be contra-indicated—possibly used with great advantage. What is to be done for this patient is this: Have a large airy chamber—a thing very difficult to get at in many cases of private practice if there be not a sufficient amount of pecuniary competence. Keep that chamber at a temperature of 60 deg. or 62 deg. I do not think that a higher temperature is desirable in pneumonia. I would say 65 deg. to 67 deg. in broncho-pneumonia, and 72 deg. to 75 deg. in bronchitis. The chamber should be well ventilated with *no* or *few* draughts. Here is a difficulty again. But draughts are not so injurious in pneumonia as in bronchitis. Neither is the dryness of the air; though in the case of the air being too dry, by the action of a fire or the prevalence of a dry north or east wind, some means may be taken to impart the mollifying influence of water. This can be done by setting a basin or basins in the room in which is to be poured hot water. We differ here from bronchitis again, where a moist air is necessary to soothe the irritated mucous surfaces, and the bronchitis kettle can be usefully brought into play. *Rest* is wanted for our patient—anatomical and physiological. Under the first heading may come the position of the patient. He must be so placed that the motions of respiration may be as free as possible; and under the second he must not be bothered with business or with mental processes of any sort, and especially be debarred from talking. He has quite enough to do with that constant hacking cough of his, and with getting breath. Thus, by means of a fitting temperature, general composure, and physiological rest particularly, the patient will in the course of nature probably arrive at a crisis before the tenth or eleventh day. But nourishment must not have been omitted in the meantime. You cannot load him with heavy food suitable for the body in a state of activity, for the process of digesting it would but interrupt what I have called physiological rest. Milk and animal broths seem the best foods, especially the former, the latter being only used as a relief from the constant exhibition of the first.

A Dr. Robert Hamilton opposed the exhibition of too much fluid as a component in the materials of nutrition, on the ground that it loaded the vessels. There seems some reason in this. An egg beaten up (when wine is in the course of exhibition it can be conveniently mixed with it) is an appropriate article of diet.

After the crisis you have the sufferer pretty much exhausted. Now comes the corroborative treatment—the rebuilding-up. It has always appeared to me that a great objection to the blood-letting system was the waste of that precious fluid which in convalescence was to come in so usefully. We throw away our capital—we have no opportunity during the disease to increase it and now we find ourselves bankrupt. No wonder that the anti-venesectionists can bring statistics to prove that blood-letting increased the mortality—increased the mortality! That was a curious characteristic of a method of cure. In convalescence, as there is a tendency to relapse, we must be more careful in many respects than during the severity of the attack. We must be more guarded in reference to draughts and the taking of cold. We must feed up the patient with mild nutritious food and assist the system in its assimilation with more or less of wine or other stimulant. We must re-fortify the constitution with iron—perhaps cod-liver oil—with cinchona or quinine.

But it may be said that this is all expectant, or nearly so. Well, so be it. I think that the true system of the treatment of simple pneumonia should be expectant. A gardener cannot force a plant to grow by violence. His function is to create, supply or promote such surrounding circumstances as will help his plant to grow. Our object should be to remove obstacles to the patient's *growing* better, to supply circumstances to enable him to attain the grand point whic the *vis medicatrix Naturæ* is always aiming at.

But would I reject *heroic* measures when needed? By no means. Have your lancet ready, your lecches, your antimony, and your alcohol. Cases do not always proceed in the ordinary or typical manner. Sometimes you may have very desperate cases—desperate from the nature of their causation—from complications—from peculiarities in the patient or from incidents in their course. In a very plethoric subject laboring under a severe attack—temperature high (say 105 deg.), with a rapid pulse (say 120)—great dyspnœa—the right side of the heart staggering under the block, the best thing to be done is to draw blood and to draw it freely, never forgetting, however, that it is your capital account you are drawing from. Marked relief is procured in this manner; and that relief clears the way for us—clears the blocked line and

enables us to travel more smoothly—bring us back to a state of things more akin to the typical or ordinary pneumonia. The amount of dyspnœa—the imminence of apnœa—the strength of the patient—the amount of blood to spare—and many other circumstances, must be collated and reasoned on the practitioners' mind. The passive congestion of the aged, even when associated with a distressing state of the circulation and respiration, does not indicate bleeding—contra-indicates it even. So does a constitution vitiated by the prolonged use of alcohol. In young children a leech or two takes the place of venesection. But even in weak patients from breathlessness and pulmonary distress, and an engorged right side of the heart, the question of venesection may arise. Every case, in fact, of pneumonia must be treated on its own characteristics. You have in the weakly the debilitating effect of the bleeding to anticipate, but sometimes you must run the risk to save the patient from dissolution, or a disorganised state of the lung. Chronic pneumonia degenerating into phthisis—and tubercles were no doubt the frequent sequels of the depletory method. On the whole, then, I should say that blood-letting in pneumonia should not altogether be banished from our Armamentarium—quite the contrary: but that it should be resorted to with deliberation, thoughtfulness, calculation and caution. I hope the use of the lancet is not so obsolete in rural neighborhoods as it is in towns, for I am sure the hardy and robust agriculturist must often present a fair object to withstand easily the effects of depletion when it is required.

In *antimony* I do believe that we have a very valuable drug. Like bleeding, it used to be pushed to a very great extent. People, in what we will now call ancient times, forty or fifty years ago—crammed the patient with antimony after bleeding—used to nurse the patient into tolerance of the drug when it was intolerable in order to gain advantage from its specific virtues. Some bold heretics (principally on the Continent) depended on antimony without bleeding, and gave it in very frequent and large doses. Dr. Macintosh (a very good practical physician) depended much on it, saying that it "reduced the scale of the system." I have not time in this paper to elaborate the cases and the circumstances in which I think antimony should be resorted to, but I may remark that it will often come in as a depressant when there are reasons against bleeding, that its diaphoretic and expectorant action are generally beneficial.

With regard to veratria and aconite I can say nothing. Perhaps some members will kindly favor us with their experience on these two drugs.

Calomel and opium, again, was a favorite medicine with our fathers. I believe calomel and opium can be used now with discretion advantageously. My experience is that the bowels should be moderately relieved, and the irritative diarrhœa sometimes accompanying or following pneumonia should be soothed, excessive alvine discharges checked.

Opium used to be given to allay the pain and the cough. This is a dangerous expedient, though a dose of opium may in certain circumstances be allowable. It is not, however, so dangerous in pneumonia as in bronchitis.

Warm cataplasms seem to relieve the local pain in the early stages. Leeches, too, sometimes give local relief, though the objections to their use on account of the loss of blood must be the same, though in a minor degree, as those to abstracting blood from a vein.

Blisters are sometimes useful, but seldom. Their great use is in pleurisy, and we sometimes have pleuro-pneumonia, generally indeed some pleurisy, in the viscera pleura covering the affected lobe or lobes.

Senega—or senega with ammonia—I consider most useful in the exhausting expectoration succeeding pneumonia, especially in the aged.

But alcohol, we had nearly forgotten this potent drug. Here is a hobby, too, that has been overridden by a certain school. I consider alcohol a most valuable help to us, very valuable, indeed, indispensable; but that it has been used by its advocates indiscriminately. The use of alcohol wants great discrimination. In the phlogistic forms and stages of pneumonia I think it is decidedly contraindicated, but where there is flagging I think it necessary. I think it necessary when there is exhaustion, when there is a dry tongue, when there is a cardiac failure, and when there is delirium. The pulse is not so high in pneumonia as might have been expected, at least it is low in comparative relation to the respiration. When the pulse gets over 120 alcohol is required. And alcohol, in the shape of wine, is most useful after defervescence as part of the usual diet. In the nature of this paper one can only speak of pneumonia in the abstract. I have all along wished it to be understood that in each individual case we are subject to modification from concomitant causes. Digitalis is often useful, and from different reasons, and in different doses, sometimes to depress excitement, and sometimes to stimulate the heart.

Another form of treatment, more in vogue in Germany than in England, is the application of cold. The reduction of the temperature by cold I have no experience of, shall be glad to hear observations from any member who has. We could not apply cold to the affected locality at the same time as a warm cataplasm. But besides this, in the case of hyper-pyrexia I should think it better applied to the head than to the chest.

In senile pneumonia, in pneumonia associated with constitutional debility, in the pneumonia in or after fever, or the exanthemata, in septicæmic pneumonia we should, in my opinion, be conservative, corroborative, and supportive. In most of these conditions the complaint is principally

hypostatic. In what I have called the "ancient days," when a crepitation was detected from any cause, out I fear the lancet was apt to come, and blood taken away from the reservoirs when fulness and force were what was required. Such cases want a greater degree of warmth than has been specified, mild, continual, easily digested articles of food, with a regular adapted and prescribed supply of wine. Depletion is out of the question. There is great weakness after measles. I have seen inflammation of the lungs succeeding measles treated with a leech, and the bite bleeding excessively, I have seen the child die. Bleeding is as inappropriate after measles as a blister after scarlatina, from which I have seen another child die. Good nursing in all cases of pneumonia is of the first importance, and very especially in the pneumonia of the aged and feeble.

I may be permitted a few words on the prevention of pneumonia and prophylaxis. Pneumonia is more prevalent in temperate, humid, variable climates than in countries characterised by a clear cold dry air. It is more prevalent among men than among women, as the former are more exposed to vicissitudes of temperature. It is more common among the indigent than the well-to-do; obviously enough, as the latter are more able to take care of themselves. These facts show that the disease is preventable. In a variable climate like ours, where the thermometer will sometimes drop twenty degrees in as many hours, people should be on their guard. I believe one of the most satisfactory methods of prevention, not only of pneumonia but many other diseases, is the proper protection by warm habiliments of the surface of the body. Flannel is invaluable, and ought to be worn by everybody in these islands.

Then with regard to prophylaxis, it has often occurred to me that treatment in the stage of indisposition preceding the rigor may very reasonably be supposed to prevent the development of the malady. We cannot prove that we prevent it, because we are not sure that it would have occurred. The careful and prudent often prevent ills without being able to demonstrate that they have done so. I believe that rest, extra clothing, warm *pediluvia* and febrifuge drinks taken when the patient feels out of sorts—the period of *malaise*—when a person "feels that he has taken cold"—will often hinder ulterior mischief. The best medicines in such a case are liquor ammoniæ acetatis, or a moderate dose of Dover's powder. It is a notable fact that there exists a personal proclivity to pneumonia, whether a preceding attack predisposes to a subsequent one or not does not matter. Now, when a person disposed to lung inflammation adopts, with good reason, prophylactic measures, and succeeds with them, there must be a fair presumption that he has warded off a serious illness. At all events in his circumstances it is his duty to take time by the forelock.

In introducing for discussion the treatment of pneumonia, I have had no novel or surprising method to advance, nor do I believe in the possibility of any such novelty being forthcoming. What I would urge is that the complaint should be treated on rational and common-sense principles, carried out in accordance with our physiological and pathological knowledge. I would not despise certain methods because they are old, nor sneer at recent ones because they are new. I think it is our duty to find out and accept what is proved to be beneficial, never forgetting to balance most carefully the divergent bearings that are existent in most cases.—*Dublin Med. Press and Circular.*

CHLORATE OF POTASSIUM TO PREVENT ABORTION.

Dr. E. S. McKee reports (*Lancet and Clinic*) the case of a woman who aborted ten times consecutively, having conceived twice by one husband and eight times by another. These abortions occurred in the period between the fifth and eighth month. Seeking professional aid when pregnant for the eleventh time, Dr. McKee could find no evidence of syphilitic or other disease to account for the repeated abortions. Chlorate of potassium was ordered, in doses of fifteen grains three times a day, and was continued with but few intermissions until the end of pregnancy, when a healthy boy was born.

In the following pregnancy the same treatment resulted in the birth of a healthy boy at term. His opinion is that the abortions were due to fatty degeneration of the placenta, which in the last two pregnancies was prevented by the chlorate of potassium.

A LECTURE ON NETTLE-RASH.

By McCall Anderson, M.D., Professor of Clinical Medicine in the University of Glasgow; Physician to the Western Infirmary, etc.

Urticaria (Urtica—A Nettle) Nettle-rash —Urticaire—Nesselausschlag.

The *symptoms* of this disorder are very familiar to most persons, seeing that the rash is identical with that resulting from the sting of the common nettle (urtica urens); hence the term nettle-rash. It makes its appearance in the shape of circumscribed elevations, rarely larger than the finger-nail, which are rounded or oval, or which assume the form of segments of circles (pomphi or wheals); and when the patches are present in their most typical form, the center of each is pale, while the periphery is red. This eruption is accompanied by itching, burning, or stinging sensations, which are increased by scratching, and are often very distressing; but its most remarkable character—that by means of which it can be distinguished from most other eruptions, and which often enables us to say that a rash is a member of the nettle-rash group, although it does

not assume the typical character—is the wonderful rapidity with which it appears, and its transient character; for, in a few minutes, it may be fully developed over the greater portion of the body, and within an hour it may all have vanished, although sometimes two or three days elapse before it disappears; it is never followed by desquamation. Its tendency to resolution is indicated by the wheals feeling softer, by the fading of the peripheral redness, and by the subsidence of the irritation. Occasionally, vesicles or bullæ make their appearance upon the patches if the inflammatory action run high, so that the careless observer might mistake the eruption for herpes or pemphigus. And not unfrequently the rash is accompanied by œdema, especially where there is much loose cellular tissue; or œdema may take the place of the eruption—oftenest on the hands and face (*urticaria œdematosa*). The extent of the rash is very various; sometimes it is partial, being limited to the hands or face, while at other times the whole surface is more or less involved. Sometimes the patches are distinct from one another, sometimes they are confluent (*U. conferta*). It presents, too, certain peculiarities, according to the region affected. "When it occurs on the face, it generally produces an œdematous swelling, especially of the eyelids and lips; the wheals, however, are less distinct than usual, and the rash for the most part assumes the character of an urticaria rubra, and consists of red lines and striæ. The neck is comparatively rarely the seat of this eruption, which is, however, more commonly seen on the chest and back, where, as on the face, it often takes the form of striæ, and sometimes of peculiar wavy lines. On the limbs, it is observed less frequently than on the trunk. When nettle-rash affects the neighborhood of a joint, the skin over the articulation becomes swollen and œdematous. If the hands and feet are attached by it, the patient often complains merely that they feel as if covered by some woolen substance * * and no particular change in the appearance of the skin of these parts is to be detected. In some cases, however, the fingers and toes become so swollen that their movements are interfered with." (*On Diseases of the Skin*, by Ferdinand Hebra, M.D., Sydenham Society's translation, vol. i., p. 304).

The rapidity with which nettle-rash comes out, and its evanescence, have led to much speculation as to its cause. There are some who hold that spasm of the muscular fibres of the skin leads to the development of pomphi; while Liveing is of opinion that they are the result of a spasmodic contraction of the muscular coat of the vessels. The most generally received opinion, however, is, that they are due to an acute inflammatory œdema, having its seat in the papillary layer of the corium; and the reason why the rash is so fleeting is, apparently, that the exudation is thinner and more serious than in the case of most other inflammatory affections, and that the vessels soon recover their tonicity, and absorb the exudation.

Urticaria is usually an acute affection which disappears in a few hours (*U. ephemera*), or at most within a few days (*U. evanida*, and sometimes it is preceded and accompanied by fever (*U. febrilis*). The presence of febrile disturbance is rather a favorable feature than otherwise, for then there is a reasonable hope that the attack is an isolated one, and will be of short duration, disappearing with the transient cause which has produced it.

It may seem strange to speak of chronic urticaria, seeing that the grand characteristic of the rash is its evanescence; but what is meant is that, although each individual rash is of short duration, the disease is kept up by constant relapses, and thus may continue even for years (*U. perstans; Nesselsucht; Urticatio*). In this form, errors of diagnosis are apt to arise, for the eruption is, in the majority of cases, nearly or completely absent when the patient presents himself for examination, and then all that we can see upon the skin is the eruption produced by the nails of the patient in scratching (elsewhere designated a puriginoid eruption); but an inquiry into the history of the case will prevent errors, and generally we are told that the eruption comes out when the patient is undressing at night or when he gets warm in bed, or under the influence of nervous excitement. In these cases, too, we may be helped in our diagnosis by writing letters upon the skin with a pencil, which is generally followed almost immediately by a nettle-rash tracing.

There is a variety of nettle-rash to which the term *U. nodosa seu tuberosa* has been given. It is a rare affection; it appears in the shape of pretty hard nodosities about the size of a split marble, and of a reddish color, which involves the skin and subcutaneous cellular tissue, which occur oftenest at night, and disappear in a few hours, frequently to recur. They may involve any part of the body, but the extremities and loins are specially liable to attack. In very rare cases, owing to excessive congestion of the nodosities, rupture of the capillary blood-vessels ensues, so that, after their subsidence, round ecchymoses are left, which gradually disappear. Generally, the nodosities are multiple; but, occasionally, only a single one make its appearance. A case of this kind came under my observation some years ago. A gentleman, about fifty years of age, and otherwise apparently in good health, came to show me a swelling upon the left side of the neck, just below the ear. When I saw it, it was beginning to subside; but it was still three inches in diameter, and raised about an inch and a half above the level of the surface. He told me that he had been subject to this for ten years, the swelling coming on about once in two months, or oftener in damp weather.

From its commencement to the time of its attaining its full size, no more than five minutes ever elapsed, and sometimes its growth was so rapid that its increase in size could actually be seen. As it grew larger, it became hard, and was the seat of a slight tickling sensation, and, when very large, it interfered with mastication. It always disappeared within a few hours, generally within two or three. It never developed upon any other part of the body, and no neighboring irritation —caries of teeth, etc.—or other cause was apparent.

Only one other variety of urticaria is worthy worthy of mention, and is less fleeting than those previously alluded to. In it, the inflammatory exudation occurs around the cutaneous follicles, and is accompanied by the deposit of lymph, leading to the formation of large red papules. These are exceedingly itchy; and, as the patient does not spare himself, the summits of many of the papules are torn off by the nails, and the blood exudes dries up into little blackish crusts, thus somewhat resembling prurigo. Mingled with the papules are generally found some of the typical nettle-rash wheals. This is the variety of urticaria most frequently met with in young children; it is most commonly seen upon the hips and extremities, and often lasts for months. It corresponds with the *Lichenurticatus* of Willan.

Etiology.—This is one of the few diseases of the skin to which the term neurotic may, not inappropriately, be applied, seeing that the vaso-motor nerves are principally at fault. This vaso-motor disturbance may result from direct irritation of the skin, or may be reflex, arising from the irritation of distant organs and tissues; but, whatever the cause may be, the first consequence is contraction, which is succeeded by dilatation and paralysis of the capillary vessels of the affected parts.

The most familiar illustration of local irritation, resulting in nettle-rash, is to be found in the sting of the common nettle (*Urtica urens* or *dioca*), the sting resulting from the irritation of the fluid in the glands on the under surface of the leaves connected with the prickly hairs, which contains sulpho-cyanogen. It is also often called forth, in those who are predisposed, by scratching the skin, or by the bite or sting of insects, such as the flea, the bug, the mosquito, and the wasp; in which case, in the center of each wheal, the seat of puncture, in the shape of a dark point, is to be seen (*Urticaria traumatica*). Some years ago, I received a telegram asking me to visit immediately a well-known gentleman, in the West of Scotland, under the following circumstances: While picking strawberries in his garden, he put one into his mouth containing a live wasp, which stung him on the right side of the tongue near its root. In about five minutes, his tongue was so much swollen that he could scarcely move it; and within ten minutes the whole surface was covered with nettle-rash, which, commencing on the head and neck, rapidly spread over the whole body. The affected parts were of a deep red color, were very much swollen, and intensely itchy. The first medicine at hand was citrate of magnesia, of which he had half an ounce; and about an hour afterwards he vomited, putting up with the vomited matter some strawberries and gooseberries of which he had partaken. When he was sick, the itching almost disappeared, but returned again afterwards, though not with the same severity. Three mild antibilious pills were then administered, which acted in about two hours; and within four hours after the commencement of the nettle-rash it had entirely disappeared. The other day I saw, in consultation with Dr. Miller, of Dundee, a single lady who had been troubled with nettle-rash for eighteen months, in whose case the washing of the face with warm water brings it out at once, so much so, that for half an hour thereafter she is unable to go down to breakfast on account of the disfigurement.

Amongst other internal causes which may produce nettle-rash by reflex action may be mentioned the following,—

a. Irritation of the uterine nerves in connection with uterine disorders of various kinds. Hebra mentions the case of a patient who had flexion of the uterus, and in whom nettle-rash was induced fifteen times in succession as the result of the introduction of the uterine sound; and cases have been recorded in which the rash appeared in connection with each pregnancy

b. In some persons, mental emotion is sufficient to call it forth, such as an excess of joy or grief; and once it has appeared, it is very apt to return from the slightest causes, and even from speaking of it. Some remarkable cases of this kind have been reported by Alibert. He once saw a young woman who could not enter a drawing-room without having the whole skin covered with nettle-rash, so much so that she could not dance or enjoy any other recreation; an ecclesiastic who could not celebrate divine service because the eruption immediately came out, and caused him to scratch himself with the greatest violence; and a poor woman who for sixteen years was the victim of this complaint, and who could not speak without the whole body being covered with the rash.

c. Derangements of the digestive organs are very apt to produce it, or partaking of certain articles of food, or even food to which patients are unaccustomed (Dr. Thompson). The kind of food which produces it varies in different persons, but they soon get to know what they cannot take with impunity. Shell-fish, such as muscles, oysters crabs, and lobsters; fruits, such as nuts and almonds; vegetables, such as onions and garlic—especially if underdone; meat, such as pork and sausages; and medicines, such as valerian, cubebs, turpentine, and quinine, are, perhaps, most apt to

induce it. In a letter which I received some time ago from a medical friend on the subject of nettle-rash, he mentions the following substances, as being apt to disagree with him; "*In primas*, nuts of all kinds; haws from the hawthorne, especially if very ripe; raisins, figs, prunes, and dried fruit of all kinds, especially if containing sugar. Dates do so very rapidly; sometimes grapes, if I eat the skins. Almonds, wheat, new oats, peas (green and dried); beans of all kinds, unless cooked; most pastries if they contain a good deal of oil, and are what are called heavy or rich; infusion of senna; and common tea, if strong, and without cream and sugar. Neither coffee nor chocolate injures me, but cocoa does; and common scones and rolls, if the loose flour be left on them, especially if they be taken hot, and spread with butter. Opium and Dover's powder sometimes produce a like effect. The attack begins in this wise. One day, at a dinner-party I thoughtlessly began to eat a few nuts, when, almost instantly, even when they were on the tongue, I began to feel a tingling sensation, with heat, and a sense of fulness in the throat, and swelling of the fauces. In a few minutes, itching and tingling began in the palms of my hands and soles of my feet, and within twenty minutes the whole body was covered with rash, as if I had been thrashed all over with nettles . . . My usual remedy is brandy or whiskey; indeed, I can eat most of the above-mentioned articles if I am drinking whiskey-toddy at the time."

The following case is also worthy of being put upon record. I quote from a letter of a relative of my own: "My experience of nettle-rash is anything but recent, as it is now nearly thirty years since I discovered that I could not eat butcher's meat in any form without causing it, upon which I finally gave up the indulgence of that taste. Since then, I have once or twice had slight attacks of nettle-rash from partaking of very strong soup, but none of those violent symptoms which the solid meat used to occasion. I first made the discovery after a long fever I had in 1830-31. I had previously suffered occasionally from nettle-rash but not violently, nor uniformly, on eating meat. After my fever, however, it was a clear case. It was long before I found that everything in the shape of butcher's meat was inadmissible. Many trials were made with meats, and portions apparently as tender as, or more so, than fowl, as for instance, rabbits, ox's or sheep's tongue, sweetbreads, etc.; but all with the same inflexible result, and that whether I knew what I was eating, or expecting to suffer from it, which satisfied me and the most incredulous around me that imagination had nothing to do with it. The symptoms did not begin for an hour or two. The first was the feeling of a lump in the stomach, perceptible even to the touch; then appeared nettle-rash on my wrists, my arms, my groins, and other tender parts of the skin, at first, in separate white blisters (as if an army of fleas and bugs had attacked me), which shortly agglomerated into large masses of white blisters. Along with this the inside of my throat and nose became swelled, my voice hoarse, and a feeling as if I had a violent, stuffy cold in the head. If the attack were less severe, I used to go to bed, and was well by morning. If more violent, I used to take magnesia, which acted strongly on my bowels, causing first faintishness, and then severe purging, after which I became well. Various members of my wife's (she is a blood-relation of his own) family have been subject to nettle-rash, but not from the same cause. My mother-in-law could not eat barley-meal, nor my brother-in-law oat-meal, without suffering from it, though not, I believe, so severely as myself. My wife cannot let figs or wall-flowers touch her face without producing a rash. . . If you will make it worth my while, I will come down at the Whitsuntide holidays and be exhibited. I will also eat the Ornithorhynchus paradoxus, if you can catch one unstuffed, and finally determine whether it be bird or beast."

This case illustrates the occasional hereditary nature of the disease—a point which has also been brought out by other writers; amongst others, by Trousseau, in his work on *Clinical Medicine*, Sydenham Society's translation, vol. ii, p. 285.

In many cases, especially in chronic urticaria, no cause can be made out. In the latter, the reason may be that the cause which originally produced the attacks has passed off, and the disease has been kept up owing, so to speak, to the skin having contracted a bad habit; or it may be the result of some peculiar idiosyncrasy, which is a convenient term to hide our ignorance.

Diagnosis.—When the eruption appears in its typical form—in the shape of wheals which are pale in the center and red at the edges—it cannot be mistaken for any other; and when it is due to the sting of an insect, the dark point in the centre of each wheal is characteristic; but when it assumes one of the less usual forms, the lesion being erythematous or papular (*Lichen urticatus*) or tubercular (*U. nodosa*), mistakes may sometimes arise, if due care be not taken. Such errors may, however, be generally avoided by noting the presence of the four following points, which almost invariably characterize the members of the urticaria group: 1, the rapidity with which the eruption makes its appearance; 2, the itching, burning, or stinging sensation to which it gives rise; 3, its short duration, although the disease may be kept up indefinitely, owing to the occurrence of successive crops; 4, its not being followed by desquamation.

Treatment.—The first point in the management of any case of urticaria is to endeavor to find out, and, if possible, to remove, the cause or causes, the nature of which has already been sufficiently considered in a former section.

In acute cases, the eruption generally subsides within two or three days, when no treatment is adopted; but generally a sharp purge is of use, especially when, as in the majority of instances,

the eating of some indigestible food, or digestive derangement, is at the root of the mischief; and, if we have reason to believe that such food is still in the stomach, as indicated by nausea, etc., an emetic of mustard, ipecacuan, or sulphate of zinc, may be administered at the outset. In all such cases, stimulating food and drink should be avoided, and the diet should be of the simplest kind.

In chronic cases, a similar line of treatment should be pursued under similar circumstances, and, where we have reason to suspect that it results from the digestion being disturbed by some particular kind of food, the nature of which varies in different persons, owing to their peculiar idiosyncrasy, we may with advantage follow the advice of Willan, who wrote, "I have desired several persons, affected with chronic urticaria, to omit first one, and then another, article of food or drink, and have thus been frequently able to trace the cause of the symptoms. This appeared to be different in different persons. In some it was malt liquor, in others, spirit, or spirit and water; in some, white wine; in others, vinegar; in some, fruit; in others, sugar; in some, fish; in others, unprepared vegetables." Like most other observers, however, he found that, in some cases, a complete alteration of the diet was not of the least avail. It would be quite out of place to refer to the means to be taken for the removal of the many other causes of this affection, as these must be treated upon general principles, and in the same way as we should do if they were independent of urticaria.

When no cause can be made out, or where the supposed cause has been removed, and the eruption continues to crop up, we must treat it emphatically. We may, for example, try the effect, as Trousseau suggested, of the administration of sulphuric ether in doses of twenty to forty drops in water, or of quinine in full doses, or of arsenic, which is only exceptionally useful. But the medicines from which, perhaps, most is to be expected are atropia and bromide of potassium; the former may be administered subcutaneously at night, or night and morning, the initial dose for an adult being $\frac{1}{100}$ of a grain (*e.g.*, 5 minims of solution of one grain of sulphate of atropia in 500 in water); the latter in doses of ten grains dissolved in water three times a day. In either case the dose should be gradually increased, *either until the disease begins to yield, or until the supervention of the usual physiological effects* renders it unsafe to push the experiment further. Occasionally good results are obtained from the continuous current of electricity for ten minutes night and morning, one sponge (the positive pole) being applied to the top, and the other to the bottom of the spine.

In obstinate cases, a complete change of air and scene and occupation is desirable, and sometimes advantage is obtained from visiting one of the alkaline spas, as Vichy, or from a course for three or four weeks of the baths of Leuk, in Switzerland.

Local treatment is generally resorted to, more with the view of alleviating the distress of the patient than in the hope that it will cut short the disease. The parts, for example, may be sponged with vinegar and water, or with eau de Cologne, or with a lotion of carbolic acid. An ointment containing chloroform or a mixture of chloral and camphor may sometimes be of service, and in exceptional cases not only temporary relief, but permanent benefit may result from the use of the tarry preparations, such as a lotion composed of equal parts of tar, soft soap, and rectified spirit.

THE CANADA MEDICAL RECORD

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MONTREAL, AUGUST, 1885.

The Canada Medical Association, at their meeting last year, were invited to hold their next meeting at Winnipeg. The invitation was accepted. Owing, however, partly to the rebellion in the North-West, and partly to other causes, the profession at Winnipeg find it unpracticable to entertain the Association this year. The Medical men of Chatham, Ont., have very promptly and heartily stepped into the gap and extended a cordial invitation to the Association to meet in Chatham, which we understand has been accepted. The outlook is very bright and a number of papers of interest are already promised. The time of meeting is the 2nd and 3rd Sept. next.

All members by applying to Dr. Stewart of Montreal, the Secretary, will be supplied with certificates, enabling them to go and return for one fare and a third.

We hope that the meeting will be largely attended.

At the Annual Meeting of the American Medical Association in 1884, the President, Dr. Austin Flint, in his address, called attention to the desirability of having the Triennial International Medical Congress hold its meeting in 1887 in America.

As the Association was the only organized representative of the profession in the United States he recommended the appointment of a committee to report upon the propriety of extending an invitation to the Congress which was to assemble in a few months in Copenhagen.

The committee to which this section of the President's address was submitted, reported a series of resolutions, providing for the appointment of a committee of eight, to proceed to Copenhagen, present the invitation on behalf of the profession of the United States, and if it was accepted the committee was authorized to continue in existence, to add to its numbers, and make all necessary arrangements for the meeting and organization of the Congress. These arrangements seemed to meet with general approval, and the profession in Canada as as well as in the United States were looking forward to a happy and profitable meeting in Washington, D.C., in 1887 of many of the most eminent men from all parts of the scientific world. Unfortunately for the welfare of the Congress, however, a good deal of unfriendly feeling now exists among the profession in the United States, on account of the members added to the original counties, and of the manner in which officers of sections have been appointed. The West claims that the East have taken to themselves too much power and appointed themselves to too many prominent positions. The Western members of the profession feel that the officers of the coming Congress should be more geographically representative of the whole profession. They say the wisdom and scientific attainments of the Medical profession of the United States are not by any manner of means confined to a few men from Washington, Baltimore, Philadephia, New York and Boston. The code question has also been drawn into the discussion, and some of the newly appointed members of the committee of arrangements hold opinions in regard to the code of ethics that the American Medical Association repudiate.

All this is to be deeply regretted, and in fact seriously imperils the success of the Congress, if not its assembling. The last London Lancet received at time of writing intimates that the International Medical Congress will not come to America unless the whole profession of the United States combine cordially in making a successful meeting.

There are yet two years to elapse before the meeting, and we hope that ere that time these petty Medico-political differences of opinion may disappear, at least from the surface, and that the members of the profession in the Eastern cities will consent to join the committee of the American Medical Association, and by their presence and co-operation insure success to the Congress in 1887.

The spread of small-pox in Montreal and surrounding municipalities is indeed assuming alarming proportions. There were 43 deaths from this loathsome disease during the week ending August 15th. Of these 42 were interred in the Roman Catholic Cemetery and *only one* in the Protestant Cemetery.—"*Thereby hangs a tale.*"

REMOVAL OF THE KIDNEY.

On the 14th ult. Dr. Hingston removed the right kidney from a young lady who had been suffering severely for several years from hydronephrosis of the displaced organ. The lateral incision was adopted. The patient made an excellent recovery without any untoward symptom. This is so far as we can learn the first time this operation has been performed in Canada.

A popular physician was much pleased with a certain aerated water, and by his assiduous recommendations procured for it a celebrity it justly deserved. The doctor acted solely in the interests of humanity generally, and expected no return. To his surprise there came one morning an effusive letter from the Company, stating that his recommendations had done them so much good that they "ventured to send him a hundred ———" Here the page came to an end. "This will never do," said the doctor; "it is very kind, but I could not think of accepting anything." Here he turned the page, and found the sentence ran—"of our circulars for distribution."

PROPER TIME FOR TAKING MEDICINE.

The proper time for taking medicines, whether before or after meals, is a matter of considerable importance, and requires careful consideration. In many cases the chemical nature of the medicament will indicate the proper time.

According to the *Bull. gen. de. Ther.* the local irritants, e. g. salts of iron, copper and zinc, and arsenic in large doses, should be taken directly after meals into a full stomach. Small doses of medicine, which are to act upon the mucous membrane, should be taken on a empty stomach. Silver oxide and silver nitrate should be taken during a period of rest, in order that they may locally act upon the mucous membrane of the stomach, Iodine and iodides also should be taken on an empty stomach. The presence of starch and acids, which decompose and modify the iodine preparations diminish their effectiveness. The acids which are prescribed for overcoming the acidity and preventing fermentation in the stomach must be taken before meals, so as to increase the secretion from the glands of the stomach. The alkalies are given during meals when they are to act upon the acids of the stomach, and before meals when they are to be absorbed by the blood, so as not to interfere with the digestion by nutralizing the acids in the stomach.

Some of the metallic salts, especially mercuric chloride, also alcohol, tannin and other medicines, modify or destroy the digestive powers of the pepsin, and must therefore be given on an empty stomach. Small quantities of alcohol, as contained in the ordinary medicinal wines, have no injurious effect on pepsin. Cod liver oil, phosphates and similar medicines may be taken with meals.

" The Eastern Medical Journal, " of Worcestor, Mass., has now commenced to appear fortnightly instead of monthly as heretofore. The intention of its Editors is to issue it weekly in the near future.

Daniel's Medical Journal. This is the latest production in Medical Literature, and hails from Austin, Texas. The magazine is attractive in appearance, of a deep red color and illuminated with the Star of Texas on its front cover. May it long shed its rays of light into the minds of the readers.

In the current number of the *Fortnightly Review* Dr. Morell Mackenzie contributes an article on Medical Specialism, in which he asserts that the general physician is fast dying out, and hat before long the profession will consist of only two classes, specialists and general practitioners. The day of the "pure" physician he thinks is over, and he ought gracefully to retire from the struggle, a beaten man. This may be Dr. Mackenzie's wish, but in my opinion it is far from being realised. For several years past I have watched the modern specialist closely, and, in my opinion, he is losing rather than gaining ground. The air of superiority which he always assumes when called into consultation, has disgusted the general practitioner, and his big fees tend to keep the general public away from him. The great aim of the specialist when called by a general practitioner to see a case appears to be to get the patient into his own hands as speedily as possible, and when he succeeds he generally makes good use of him if he can afford to pay good fees. My advice to the general practitioner is to keep away from the modern specialist if he wishes to keep his patient. Except it be an eye case, or the patient suffering from a disease peculiar to women, it will, as a rule, be more satisfactory to seek as a consultant the aid of a good all-round physician or surgeon. This fact is becoming recognized by general practitioners, and specialism, as I said before, is losing rather than gaining ground.

PAMPHLETS RECEIVED.

Rules for preventing the development and spread of Asiatic Cholera. Specially compiled for public distribution, from latest authorities, by E. Playter, M.D.

The prevention of opium addiction, with special reference to the value of galvanism for relief of neuralgic pain, by J. B. Mattison, M.D., Brooklyn, N.Y.

Voice in Singers, by Carl H. Von. Klein, A.M., M.D., of Dayton, Ohio. Price 25 cents.

A Memoir of Charles Hilton Fagge, M.D., late physician to Guy's Hospital, &c., P. Blackiston, Son & Co., Philadelphia.

Report of Proceedings of the Tennessee Board of Health, Quarterly meeting, July 7th, 1885.

THE CANADA MEDICAL RECORD.

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Original Communications.

GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D., Prof. Gynæcology, Bishop's College, Montreal.

Drunkenness at the moment of conception is the theme of a book written by Dr. Lentz of Tournai, France. After careful investigation it has been found that drunkenness at the time of conception is a principal cause of those nervous affections met with in infants. The writer says he finds the intelligence and moral sense of such children tainted with the influence of the vicious habit. Children born of parents drunk at the moment of conception generally died of convulsions or some other form of nervous disease, and if they lived at all were epileptics, idiots or imbeciles, with a tendency to indecency, immorality and general depravity. Such offspring when grown up have an aspect peculiar to the diathesis: the head is small, his physiognomy hebetudinous, and his gaze stupid and expressionless.

The evil effects resulting from conception at the time of intoxication is mentioned by old writers—Diogenes speaks of it, and Aristotle believed that a drunken mother would bear drunken children; Plutarch states the same thing. It is curious to note, in connection with this, that the Greek ruler Lycurgus made laws to favor drunkenness among the conquered tribes, in order to stifle their patriotism and encourage appetites that would tend to keep them slaves. In Carthage the laws forbade the use of any fluid but water ondays of intended marital co-habitation.

The subject has not received the attention that its great importance merits. That there is much truth in the views enunciated by Dr. Lentz will scarcely be doubted by those who have given attention to this subject. I have known cases where but one child of a large family had any desire for alcoholic liquor, and that child had been nursed by a mother who took her beer while doing so.

GONORRHEA IN THE FEMALE.

Dr. Martineau of Paris has stated that in the specific form of this disease the pus is always acid while in the simple form alkaline. A piece of litmus will determine this. It is of value in cases of rape to determine whether or no the guilty party was affected with gonorrhea, for then the discharge from the inflamed vulva would be acid.

SOFT UTERINE FIBROIDS.

Dr. Thos. Keith of Edinburgh in his "Contributions to the Surgical Treatment of Tumors of the Abdomen," gives a most interesting account of the history and treatment of one of these rare forms of fibroid of the uterus. The tumor had been diagnosed as ovarian by some of the most eminent gynæcologists of Germany, Italy and London. The tumor was first noticed in 1867. In 1872 Keith saw the case, and recognised the tumor as a soft fibroid, but, as the lady was 43 years of age, he discountenanced any operation—trusting to the menopause for arrest of the growth. During the following three years the tumor continued to grow slowly, when she fell heavily, striking a low railing. This was rapidly followed by ascites, and five or six gallons of fluid had to be removed every three weeks At this time Dr. Keith repeated the puncture and

found the tumor, which three years before reached to the ribs, was now as small as a cocoanut and quite fluid. Removal of the tumor was now advised, but refused by the patient,and the tappings went on till,at the 40th operation, about 250 gallons had been removed. After this no more fluid was secreted, and the patient gradually gained strength.

In 1877 Dr. K. again saw the case, when thet tumor was once more as large as when he firs saw the case, five years before. From this time the tumor grew till it was judged to be over 200 lbs weight, in 1878. Knowing the loose cellular structure of these ædematous fibroids Keith now proposed to break up this structure so as to form at least one large cavity in which the serum would collect, and from which it might be removed by aspiration. Carefully selecting a spot where the many and large veins could best be avoided an opening was made into the capsule, and the upper half of the tumor was broken up with a trochar and the incision closed. Some feverishness followed the operation. In two weeks' time the fluid had so accumulated that it was drawn off. The puncture was made low down and some distance from the incision; about seven lbs. clear serum was removed. The operation was repeated again in ten days; shortly after this feverishness set in, the temperature ran up to 105o and pulse was rapid. For the following seven months the mean temperature was 103 . Every twelve or fourteen days seven litres of stinking pus was removed, always with relief. After one of these punctures collapse followed, and Dr. Keith saw patient again, in April, '79, when he found the tumor an irregular flattened solid mass, about the size of two adult heads. The huge capsule was felt in the flaccid abdomen,like the thick walls of a large ovarian cyst after tapping.

Dr. K. now made an incision twelve or fourteen inches long through the capsule and split open the tumor as far as the pubis, opening a large cavity filled with putrid pus and broken-down tissue, and a blood clot of recent formation, the result of an accident at a tapping. The clot was as large as a head.

The abdominal wall and the capsule were matted together and as soon as the bleeding was controlled by forceps the walls of cyst and abdomen were brought together with sutures put in by a double needle, about one inch from the edge of wound. This effectually controlled the hemorrhage. After cleaning out the cavity it was dried, then washed with zinc chloride and again dried. The wound was left open and a dressing of oakum applied.

This operation was followed by a reduction of temperature and a slow but steady restoration of health, so that on the anniversary of the day she was able to go round with help of a stick.

In May, 1881, the patient was again poorly. It was found that the solid part of the tumor was enlarging the incision by steady pressure upon the opening. There was some irritative fever, and a quantity of pus was found in the old capsule behind the solid part. An incision to one side,through the uterine tissue, was made and about a pint of healthy pus removed. Free bleeding occurred, which had to be arrested by ligatures.

After a few weeks death ensued, the event being hastened by an injudicious diet of beef-steak and porter.

This case of Dr. Keith's is a very interesting one and has for us a plain word of admonition—viz., in any similar case to insist upon hysterectomy as the only proper thing to be done.

The treatment of the pedicle in hysterectomy.—Dr. Keith favors the intraperitoneal method where practicable. Dr. K.'s great and marvelous success in this operation makes his opinion very valuable to those who are undecided as to the best method to pursue in making this most serious operation.

The great trouble connected with the clamp is the difficulty to keep the stump thoroughly disinfected.

1402 St. Catherine St.

Progress of Science.

A CLINICAL LECTURE IN GYNÆCOLOGY,

Delivered at the College of Physicians and Surgeons, New York,

By T. GAILLARD THOMAS, M.D.,

CLINICAL PROFESSOR OF DISEASES OF WOMEN.

The Causes and Treatment of Abortion.—Persistent Sterility.

CASE I.—GENTLEMEN: The first patient this afternoon is Mrs. E. C., twenty-two years of age, and a native of the United States. She has been married three years, and has had no children, but has had three miscarriages.

I ask her how long she has been sick, and she replies that she has never been sick; and, as you look at her, you will believe her statement, for she has a strong and healthy appearance. So I ask her next why she has come here to see us, and she answers, because she is anxious to bear children; and, though she has been pregnant three times, she has had a miscarriage every time. She passed

two years of her married life without becoming pregnant at all, and then she became so, but had miscarriage at the end of three months. She knows of no cause for this miscarriage. In her second pregnancy she miscarried a little short of three months, but without any known cause. She became pregnant a third time, and again miscarried at about the same period as before. At none of these times does she remember to have had a fall or to have made any violent effort, or any slip or misstep, or to have had any sudden fright, or anything else which she could assign as a cause of her miscarriages. All three of them have taken place within the past year. She complains now of no headache, or backache, or any other pain, and she walks easily and seems to be in perfect health.

Now, I show this case to you not because it is a remarkable one, for you will hear such a story as this over and over again, but because I like to show you here, not cases that are rare, and such as you will seldom see elsewhere, but rather cases that are types of classes of such mild conditions as you will often meet with but which will cause you much trouble.

The history you have just heard here is one that you will hear repeated by patients again and again till you get sick of hearing it, and a patient will come back to you eight, ten, or twelve or more times, perhaps, complaining of repeated miscarriages every time, and appealing to you to help her, and, if you fail in your efforts, apparently holding you responsible for her misfortune. And let me tell you here that among the nineteenth-century women there are two classes—one, those who desire, above all things, to become pregnant and bear children; and the other, those who are anxious, above all, not to bear children. Now, this woman is thoroughly unhappy because of her sterility, and she is exceedingly anxious to bear children. Now, forget for a moment where you are, and let us suppose that your patient is a lady of a great deal of wealth and the disposition of a large estate, perhaps, depends on her having a child, and you can imagine how unhappy she would be if she had only repeated miscarriages, and how important it would be for you to find out and, if possible, remove the causes of this mishap. In general, it may be said that miscarriages occuring at the third mouth are due to one of two causes more than to any others.

But first let me tell you, what you already know, no doubt, that out of one hundred cases of miscarriage more than seventy-five will occur at the end of the third month, and the next largest number at the end of the second month, and the next at the end of the fourth month, and the rest of the number will be scattered about in all the other months. That is to say, that over seventy-five per cent. of all cases of miscarriage occur at the end of the third month of gestation. There are two explanations of this fact. The first reason for it is, that at this time the placenta is just becoming throughly formed, while the chorion is disappearing and the manner of the nutrition of the child is changing, and, instead of being localized in the chorion, which receives its blood from the whole intrauterine surface, it is becoming localized in the placenta, which draws its nutrition from a limited surface of the uterus; and, as the chorion degenerates and the placenta is forming and attaching itself more intimately to the uterine walls, the changing from the chorionic to the placental nutrition of the fœtus is marked by a strong tendency to miscarriage. In the second place, you know that at the end of the third month the uterus is becoming so large that it is just beginning to rise out of the pelvis, and at this time, as the body of the uterus rises above the brim, if its supports happen to be a little weak, it is very apt to turn over on itself either to one side, or forward, or backward; and by this means the nutrition of the fœtus is deranged, and hence this is a very frequent cause of miscarriage at this time.

Now, we will go back to the point at which I digressed and where I was saying that there are two great causes, not to mention the numerous possible causes, of habitual abortion in certain women. 1. A posterior displacement of the uterus which interferes with the proper development of the organ. 2. Syphilis. These are the two main causes; now I will give you some of the others, merely in order to impress these two on your memories. You will sometimes find in a woman who has previously borne children that a slight single unilateral laceration of the cervix will become very irritable during pregnancy, and the reflex irritation thus caused will set up uterine contractions and bring about the expulsion of the fœtus; and this will cause, perhaps, three or four abortions in the course of a year. Again, large granules will form on the cervix of some women every time they become pregnant, and these will set up enough irritation to cause an abortion. These granules sometimes resemble an epithelioma in appearance, and they are frequently mistaken for this by inexperienced physicians; but that they are not such is shown by the fact of their disappearance after every abortion. Again, mere accidental causes will produce a miscarriage in some very nervous women, and these are commonly spoken of as women who "habitually abort." But this term is too frequently applied where the physician has overlooked the true cause, and it is therefore usually only a cloak for his ignorance. Some time ago I had my attention called to a peculiar case of abortion from purely nervous influences as a first cause. The patient was a lady near the fourth month of pregnancy, who was travelling in the railroad cars with her husband. As the engine drew the cars suddenly into a dark tunnel, the roar of the train, multiplied by the echoes of the walls of the tunnel, awoke her from a sound sleep; the noise and the darkness made her believe that an accident had happened, she became greatly frightened, very soon after labor pains came on, by the time she had reached the end of her journey

the uterus was contracting violently, and soon after arriving home she aborted. I was fortunate enough to preserve the placenta, and, upon examining it, I found that she had a small placental apoplexy, and a clot of blood of the size of a walnut had formed and separated the placenta from the uterine wall, and from this focus an irritation had spread till it brought on uterine contractions which ended in an abortion.

So, also, it may be caused by a woman's measuring the height of a chair with her eye, and then unexpectedly sitting down to find it three or four inches lower than she had supposed it to be, the sudden jerk being sufficient to bring on uterine contractions. Instances are on record where such a simple matter as blowing out, instead of snuffing out, a candle, by reason of the disagreeable odor of the smoke, has caused a miscarriage; and I do not doubt that such trivial circumstances will sometimes induce it. These are all exceptional cases, and hardly to be considered. But the rule is that, in the great majority of cases, where a woman has repeated miscarriages at the third month, you will find upon examination either a posterior displacement of the uterus, or that there is evidence of constitutional syphilis in the father or mother; or you may find both these conditions.

Now, this woman's husband is not here, so we can not examine him at present for symptoms of syphilis; but she says he is a healthy man, and has promised to bring him here to our clinic next week, so that we may inquire into his condition for ourselves. I think he will come, for he, as well as she, is anxious to have offspring. So we will have to wait till then to determine whether this cause for the repeated miscarriages exists here.

But there is another cause than this which will account for the miscarriages in this case. When I make a vaginal examination with this woman standing in the erect posture, I find that the uterus is bent backward toward the hollow of the sacrum, so that the greater part of the organ lies posteriorly to a line drawn perpendicularly down through the center of her body. You may ask if I think that this slight degree of displacement backward is sufficient to account for these repeated miscarriages; and I reply that I think this is a sufficient cause. Then you may ask: "How do you suppose that this insignificant cause can produce such a result?" It would not as it is now, for that uterus is not badly displaced, but is lying only a little posterior to the central line drawn perpendicularly through her body, and, if it would keep the same position as now, it would be of no account either in a pregnant or non-pregnant woman, and no miscarriage would take place. But I will show you what occurs after pregnancy in such a case as this. At the end of the first month the uterus is slightly enlarged and its increased weight has caused it to bend over on itself still more, and so the posterior displacement is a little greater than before. At the end of two months the displacement is so great that the axis of the uterus forms almost a right angle with the perpendicular line drawn through the center of the pelvis; but even now there is no interference with utero-gestation, and the pregnancy goes on. At the end of the third month, however, when the body of the uterus has increased so much in size that it fills up the cavity of the pelvis as it lies displaced in the hollow of the sacrum, the uterus tries to rise up out of the pelvis, and the cervix does go up, but it can not pull the body up after it, because it is held down by the promontory of the sacrum, and only some lucky accident can release it. The rule is, however, that the cervix rises up, but nothing can get the uterine body out of the hollow of the pelvis; and yet, under certain circumstances, the organ will go on developing for four or five months, perhaps, without interference with the nutrition of the fœtus. But usually at the end of the third month the uterus feels the interference with its development, and so it begins to contract, and the cervix opens and labor goes on until the fœtus is expelled. Three months after, the woman goes to a doctor, perhaps, and asks him the cause of her miscarriage; and he examines her and finds the cervix all right and the uterus lying in the position I described to you as existing in this case at present, with only a slight posterior displacement, and he is at a loss to account for her misfortune. But the real cause of all was that, at the beginning of pregnancy, the uterus was lying a little posterior to a line running perpendicularly through the center of the woman's body: and you will almost invariably find that the slightest displacement posterior to this line will cause a miscarriage at the third month. Now, this exists in this woman at present, and it may possibly be the cause of her miscarriages; but before deciding I will examine her husband also. If I find that he has had constitutional syphilis, I will say that I do not know whether this displacement of the uterus is the main cause or not; but I will first remedy the condition I find already existing in the woman, and then I will treat the husband for syphilis, if I find it necessary, and I will try to keep him and the woman apart for a number of months, until I think he is entirely well and can impregnate his wife without transmitting the disease to the child. Even if I find syphilis in him, I will nevertheless treat the difficulty I find in her at the same time.

After the woman has again become pregnant I would watch her carefully as she advances, and have her come to me every four or five days or, at the longest, once a week, that I might see if every week of utero-gestation was increasing the displaced condition of the uterus. If, by the end of the second month, I should find it bent farther backward than at the end of the first month, I would place the patient on her side or in the knee-chest position, and, with my fingers, push the uterus over into its proper place, and put in a pessary to keep it in position. Supported in this way, the

uterus is able to rise up out of the pelvis as it enlarges, and pregnancy is therefore allowed to go on. If you try this plan of treatment in such cases you will often have reason to feel well satisfied with the results.

Let me tell you of a case I treated some twenty-five years ago. A lady came to me who said that she had had twelve miscarriages in succession. I examined her, and found just such a condition as we have in this case. None of the doctors who had previously examined her had discovered the presence of this displacement, because she had gone to them after each miscarriage, when the uterus had returned to its proper position. She was almost insane from these repeated disappointments. So, after she had again become pregnant, she came to me at the end of the third month of gestation, and I easily recognized a decided posterior displacement. To remedy this, I pushed the body of the uterus up above the promontory of the sacrum, and put in a pessary to keep it there, and I had her return every two or three weeks, so that I might adjust the pessary and see that every thing was progressing favorably. She was delivered of a living child at full term, and she went on from that time through four successive pregnancies without having a single miscarriage, and this plan of treatment was carried out each time. Now, I do not say that a single case proves the efficiency of this plan any more than that "one swallow makes a summer." But I have had a whole flock of just such "swallows," and they have abundantly established the effectiveness of this treatment. I am talking now, remember, only of miscarriages occurring at the end of the third month, but they will form 75 to 80 per cent. of all the cases you will meet with. The moment I see a woman who tells me that she aborts regularly at the end of the third month, I am so certain of the cause that I say to myself that she has either a slight or a great displacement of the uterus, or else there is syphilis in the family. So, in case I find no displacement of her uterus, I always look carefully for any signs of syphilis in the husband or in the woman herself. And remember, gentlemen, that syphilis sometimes creeps into the system of a perfectly virtuous woman, and no one knows how it got there. Syphilis certainly develops accidentally sometimes, and I think it is a mistake for some physicians, who ought to know better, to laugh at the statement of a man who, when asked where he got his syphilis, says that he caught it from a privy or in some other unusual way. I see nothing to laugh at in such a statement, and it seems to me that the joke is entirely out of place, for I do not see why the disease may not occur from such exposure. I have known of the case of a sewing woman in this city who became infected with a true Hunterian chancre, followed by a secondary eruption, apparently in the following way: she accidentally pricked herself in the breast with a pin which had probably retained upon it syphilitic virus from the hand of the woman in France who had made it, and who had doubtless just been dressing her chancre previously to sticking the pin on the paper to send to this country, where it was destined to infect her innocent sister.

Now a few words in regard to another class of cases besides those which occur regularly at the end of the third month. In this class the mother passes safely through the early months of pregnancy, but at the end of the seventh month, perhaps, she notices that the movements of the child *in utero*, which have previously been vigorous enough, are now becoming more feeble, and the next day they are feebler still, and so on till in a few days they have been ceased altogether, but she goes on to full term and then brings forth a dead child. This thing may have repeated six or eight times before she comes to you to seek for the cause and its cure. If you examine the placenta at the completion of one of these labors you will almost invariably find that it has undergone a fatty degeneration. The only way of preventing this woman from constantly bringing forth still-born children is to tell her to watch carefully during the latter months of pregnancy, and to let you know as soon as she feels that the child's movements are beginning to lose their vigor, and then you shall immediately induce labor and bring on a premature delivery. If it is in the seventh month, you may be able to preserve the life of the child, and your success will be more assured if delivery can be postponed till the end of the eighth month, or for eight and a half months. But the rule should be, the moment you find the child is in danger of death by reason of the degeneration of the placenta, bring on labor.

Case II.—The next patient is Mrs. A. E., thirty-seven years of age, a native of the United States, who has been married eighteen years, and been sterile all through her married life.

She says that she has been sick for ten years, and she complains chiefly of a tired feeling all over her body, and of general weakness and lassitude, with much pain in the back and neck. She is regular in her monthly periods, but at such times she suffers from pain in the head and breast. She also has a constant watery looking, but thick and tenacious, discharge from the vagina. She complains of nothing except a pretty severe cough.

Now, without an examination, this is a perfect enigma, gentlemen, and so you will find with many, many cases; and, when a man is so squeamish that he thinks it a crime to examine a woman unless he suspects some very serious condition, I do not see how he ever gets on in practice. At one time not long ago, you know, it was generally thought that an unmarried woman ought not to be examined except in very unusual cases; and I am sorry to say that there are still some who carry out this belief, and thereby make themselves responsible for much misery that might otherwise be relieved if the cause were discovered. I constantly am making such examinations in

young women of sixteen and upward, and I never hesitate where I am in doubt as to the cause of any serious difficulty.

This patient is healthy looking, but she has an appearance of lassitude, and she complains of great pain in the back and a sense of discomfort and weariness, which she dates back as beginning ten years ago. In addition, her sterility is a source of disturbance, together with a profuse leucorrhœa and occasional pain in the head and breast. Now, you might investigate this case, with only the rational signs to help you, for any length of time, without obtaining any light as to the true condition present; but, when you make a physical examination, a flood of light is thrown over it at once.

This is what such an examination reveals: As the woman lies on her back, on passing my finger up the vagina I find the uterus is thrown over backward, and with one finger on the cervix and the fingers of the other hand pressing down through the anterior abdominal wall, I discover a large tumor lying on the upper side of the uterus between its fundus and my hand, which appears to be three or four times as big as the uterus itself, rounded in outline, and moving with the uterine body. How could you ever have told what was there without an examination! The man who would prescribe for that woman without making an examination is one of two things. He is either an ignorant or a dishonest man.

Now that we have found out the presence of a hitherto unsuspected tumor here, the question arises, "Is that the diagnosis?" There is the mass which, when carefully examined, would leave some doubt as to its character did we not have a history to aid us which points to a uterine fibroid. But is that the whole diagnosis? By changing the position of the patient so that she lies on her side, and putting in a Sims's speculum, from the cervical orifice could be seen poured out a secretion of thick, tenacious mucus. I passed a small sponge, held in a pair of forceps, up to the cervix and twisted it about, and, on withdrawing it, I could pull this mass of mucus down to the mouth of the vagina, when it broke and sprang back like a piece of India-rubber. Then I said that is the immediate cause of the sterility, as such discharge always is when it is found habitually pouring out of the cervical canal. This was doubtless caused by the malposition of the uterus, which, from lying back in the hollow of the sacrum, was kept in a state of chronic congestion, giving rise to a chronic endometritis. Now let us return to the tumor, and inquire again what it may be. The abdominal walls are so thick that I could not map it out accurately, or tell whether there was any fluctuation in it or not. Now I ask, May this not be an ovarian tumor? As a rule, women with ovarian tumors become greatly exhausted within three years. Yet there are exceptions to this rule. Three months ago I operated at the Woman's Hospital for a tumor which Dr. Sims had, twenty-four years ago, declared to be an ovarian tumor of the size of a cocoanut. When I removed it, it weighed sixty pounds, and the woman got perfectly well after the operation. This tumor had unquestionably been growing for at least twenty-four years. The same week I removed another ovarian tumor that had been growing fifteen years. Fourteen years ago it had been tapped for the first time, and since then this operation had been repeated sixty or seventy times, and finally I removed it after it had been growing for fifteen years. I have frequently removed such tumors after they have been growing for nine or ten years. So this *may* be an ovarian tumor, or it *may* be a fibrous tumor. I should like very much to know which it is. If I should only pass an aspirating needle into it through the vaginal or the abdominal walls, I might easily make the diagnosis; but if I did this you might, with reason, say that I was inexcusably rash, for an immediate decision of the matter is not necessary, and exposing the patient to danger to solve the problem would be unwarrantable. This woman is already thirty-seven years of age, and she will probably stop menstruating in three or four years, and then the tumor may cease growing, and she may live till seventy years of age without suffering any harm from its presence.

I talk about this so fully because I have seen so many bad results come from aspirating merely for the purpose of diagnosis. Even the smallest hypodermic needle has its dangers when used in this way. In case there was any necessity for making an accurate diagnosis, I would not hesitate to use the aspirator; but, where nothing is to be gained by the knowledge thus derived, I would avoid the risk.

Now I will tell this patient that the best thing for her is to go home and let herself alone. I will prescribe a bitter tonic, to improve her appetite and increase her strength, for she looks quite bloodless, and she has a small, feeble pulse; and besides, I will put her on the syrup of the hypophosphites. Then I will tell her to wash out her vagina twice a day, so as to remove this secretion which keeps up a constant irritation in the vaginal canal; and that is all she needs. I would do nothing to favor the occurrence of pregnancy, because I think it is a highly desirable thing that she should not become pregnant, on account of the size and situation of this tumor, which would interfere with the proper development of the uterus.

It is a good rule to guide you always, when you are in doubt as to whether you had better risk any doubtful proceeding, to suppose your mother, or sister, or wife in the same position as the patient and then do for her just what you would for one of them under corresponding circumstances. Now I don't think, if this patient were a valued relative, you would plunge an aspirator into that tumor

just to determine its character, when you could do nothing more to help her if you knew its true nature. I think there would be fewer accidents if men would remember and follow the rule I have just given you.—*N.Y. Medical Journal.*

A CLINICAL LECTURE IN GYNÆCOLOGY.

Delivered at Bellevue Hospital.

By WILLIAM M. POLK, M.D.

Professor of Obstetrics and Diseases of Women and Children in the Medical Department of the University of the City of New York.

VAGINAL CYSTOTOMY IN A CASE OF PARALYSIS OF THE BLADDER, WITH REMARKS ON CATHETERIZATION OF THE URETERS.

This case, gentlemen, is that of a woman, about twenty-eight years old, who a year ago fell from a third-story window, sustaining injuries to the spine which resulted in paraplegia. She was admitted to the hospital two months ago. As is usual in such cases, there was paralysis of the bladder and rectum. An additional feature of interest is the fact that menstruation was also suspended. The paralysis of the limbs has now been cured four months, and the rectum, though performing its functions somewhat sluggishly, has greatly improved. The paralysis of the bladder and the suppression of menstruation continue.

First, as to the bladder. There is a constant dribbling of urine, with all the annoyances arising from it, such as the discomfort of the wet state, the excoriation resulting from the action of the urine, and the ever-present offensive odor. In addition, there is constant pain in the region of the base of the bladder. The urine is loaded with pus and mucus, contains myriads of vibriones, and is highly alkaline.

Passing the finger into the vagina, we find the uterus and ovaries normal, but between the anterior vaginal wall and the symphysis there is a rounded, sensitive tumor, in size about equal to an egg. Passing the catheter through the urethra, we find this tumor to be the bladder, and, as you see from the absence of any flow of urine, the empty bladder.

With the instrument in the organ and my finger in the vagina, I can carefully explore its base and sides, and, by placing the hand thus above the pubes, I submit its upper parts to the same process. By this means I prove that there is no tumor or foreign body in the bladder, and that the mass between the anterior vaginal wall and the symphysis is nothing more than the organ itself, made prominent by its greatly thickened walls. Extensive hypertrophy of the walls of the bladder has been the result of the spinal injury.

Let me say here that, in making a vaginal examination, if a normal bladder is empty you will find no prominence between the anterior vaginal wall and the symphysis pubis; the two surfaces can brought into close relation, and the wall moved freely in all directions over the face of the bone.

Going back a little, we know from analogy that what has taken place in the bladder and its connections is the following:

The injury inflicted upon the cord by the fall expended itself mainly upon the lumbar enlargement, arresting for a time not only all action originating there, but all that might have been sent from the upper portions of the cord and the brain. Gradually this lesion has been repaired for all the centres save those presiding over the bladder reflex and the function of menstruation. Paralysis of the bladder was not accompanied by paralysis of the uretha, for, as you see, this canal is tightly closed. Soon after the injury there was prolonged retention of urine, requiring the use of the catheter; after the patient left the hospital this gave place to dribbling of the urine, for, as she had no means of relieving herself, the urine accumulated, distending the bladder, and finally forcing itself, by mere weight, through the resisting uretha.

As you may imagine, the vesical walls began to suffer from this constant distention; but, granting that they might not resent it, they surely would find it difficult to submit to the irritant action of the now decomposed urine. As a matter of fact, the combined influence of the over distention and the irritation is shown in the hypertrophic thickening of the muscular and mucous walls of the bladder. Not only have the walls been thickened but the capacity of the organ is much diminished. Whereas, at first a quart of urine or more would be retained before dribbling set in, now four ounces represent its capacity. Does the mischief stop in the bladder? We know to the contrary; the resistance of the urethra extends beyond the bladder. If it is sufficient to cause the amount of hypertrophy and thickening witnessed here, it is sufficient to dam back urine through the ureters to the pelves of the kidneys, and set up double pyelitis with all its attendant dangers. The histories of these cases prove that such is the termination of this condition of the bladder, and, though our patient does not as yet give active evidences of implication of the pelves of the kidneys, that occurrence is a mere question of time.

Naturally we ask ourselves if this evil cannot be averted. If this patient were under constant supervision, so that the urine could be drawn every two hours and the bladder washed out twice a day and fully distended, a great deal could be accomplished; but even this would not meet the difficulty so well as another procedure—viz., *opening the base of the bladder.* Make such an opening, and you relieve the bladder from its embarrassment. The urine flows off as fast as it is received from the ureters; the bladder, relieved of pressure and the decomposed urine, will grow no worse, but improve. And more than all—the pressure being taken from the ureters and pelves of the kid-

neys, the urine flowing off through the ureters as fast as it is formed, and decomposition and its results to the pelves being avoided—not only are the pressing dangers relieved, but we put the patient in the best position to escape those that lie directly in her way.

The cure that has taken place in the lower extremities—for the patient has entire restoration of their motor and sensory functions—and the great improvement she recognizes as having occurred in the rectum, justify us in believing that in time improvement may occur in the action of the bladder; but, if she were to be left as heretofore, there is reason to believe that long before such improvement came the state of the kidneys would make it serve a short career of usefulness. The same general treatment employed since her admission will be continued—tonics, galvanism, and faradization from the region of the bladder to the lower part of the cord, coupled with the occasional use of the actual cautery over the lower dorsal and upper lumbar regions.

While the patient is being anæsthetized I will occupy you with some suggestions touching the second morbid condition—the suppressed menstrual function. Until the injury, this function had never suffered arrest; from that time till now it has been suspended. What is the cause? Unquestionably the injury to the spine, and the injury must have been low down, so as to sever the connection between the lumbar enlargement and the internal genitals, for we know that even after division of the cord in the dorsal region, *above the lumbar enlargement*, the processes of ovulation, of development of the pregnant uterus and the lacteal glands and of parturition, may go on. If we may be allowed a conjuncture, we will say that the lesion which has affected the centres presiding over the action of the bladder has likewise interfered with those presiding over the function of menstruation, and perhaps ovulation. It would be a most interesting study, that of the condition of this woman's ovaries. Is the development of the ova interfered with? Could we determine it in conjunction with a careful study of the cord, much light might be thrown upon the vexed question as to the independence of ovulation and menstruation. The two processes are so intimately associated, however, that it is probable any lesion of the cord affecting one would most likely affect both. But, whether ovulation is involved or not, menstruation assuredly is, for never since the injury has she given symptom or sign of such an occurrence. An just here let me again call your attention to the fact that we have no other cause of this cessation present. Supposing ovulation to continue, the question of pregnancy in this case must still be answered in the negative, for, in the absence of every evidence of uterine activity, even at the periods at which menstruation would fall due, we must conclude that here, at all events, the trophic changes in the uterus are so seriously impaired as to make the formation of a decidual membrane impossible. Without such a membrane the implantation and development of an ovum are highly improbable.

But the patient is now ready for the operation, so, with your permission, we will cease commenting upon these interesting but obscure topics, and turn our attention to a matter of more immediate and practical importance to her and us. The point at which to make the opening is in the median line, half an inch above the vesical end of the urethra. We must bear in mind the relation of the ureters to this line, else injury may be done their openings. The injury itself would hardly cause much inconvenience, but subsequent contraction at the seat of injury might end in constriction or even closure of the tube—a matter of great moment. These openings are situated from half to three quarters of an inch from the anterior median line of the vagina, one on either side, and are about an inch and a half from the vesical end of the urethra. Our opening will, then, be so placed as to avoid injuring not only the ureters but the vesical end of the urethra as well—a matter of less importance than lesion of the kidney outlets, but one bearing strongly upon the action of the urethra as an outlet—a question that may come up should the paralysis of the bladder be cured. The position of our patient is that upon the back, with the thighs well flexed on the abdomen.

This blunt wire curette, having a large loop, will admirably serve our purpose as a guide. Introducing it into the bladder, I place the loop at the point selected for incision and press the vesical and vaginal walls down and out on a line with the ostium vaginæ. You can easily feel the loop as I thrust this knife through the walls directly into it. Taking next this probe-pointed bistoury, I enlarge the opening toward the uterus so as easily to admit my index finger. Owing to the condition of the walls, the bleeding is somewhat more than is usual with these cases, but even here it requires no special effort at arrest.

Carrying my finger well over the vesical wall, I appreciate the condition of the diseased mucous membrane. As intimated in the earlier remarks, it is thick, and thrown into folds; and off to the patient's right is a distinct pocket in the wall, free, however, of anything like stone formation.

As a matter of some importance to determine the condition of the pelves of the kidneys, and as the urine in the bladder is so infected with the products of vesical inflammation as to furnish us with no satisfactory evidence upon this point, I will collect some directly from the ureters, by catheterizing them, and at our next meeting will give you the result of the inquiry.

We next wash out the interior of the bladder, with a warm, saturated solution of borax, introduce this glass button, having a hole through it, into the opening, and return the patient to the ward. Should we leave the opening without the button, it would speedily close. To insure a permanent opening and give free drainage to the bladder, we must

keep this perforated button in place for several weeks—perhaps as long as the paralysis lasts.

Our confident expectation is that this patient will improve greatly. Certainly she will be relieved from the drain and tension incident to a chronic cystitis, and possibly pyelitis, to say nothing of the relief given the kidneys by the free escape of the fresh urine.

We will keep the vagina clean, and for the present distend the bladder once a day with a warm solution of bichloride of mercury, 1 to 2,000 and chloride of sodium.

Before closing, permit me, gentlemen, to say a few words upon catheterization of the ureter. You have seen me do it upon this patient, after making the opening into the bladder, using a No. 5 instrument. Can it be done without such an opening? Yes. Simon did it by forcing the finger through the urethra, passing the catheter alongside and guiding its point with the finger-tip into the canal. The great objection to this procedure is that it usually results in permanent incontinence of urine —a very serious mishap.

Pawlick maintains that it can be done by following with the point of the catheter—the instrument being introduced through the urethra—certain lines on the anterior vaginal wall which indicate the course of the ureters as they enter the bladder. He states that these lines can be made evident in all cases by carrying out the following directions :—

The bladder must be empty, the abdomen free, the woman to be put in the knee-chest posture, and the perineum raised so as to distend the vagina with air. The lines are then seen starting from about the points at which we know the ureteric orifices to be situated, and running upward and outward, the course of each corresponding to that of the ureter.

There is no doubt that in cases of relaxed and distended vaginæ these lines can be brought out, but in such as present contrary conditions you will as often fail to find them.

But, granting that they may be recognized in all cases, the great defect in the method is the difficulty attending the determination of the question as to the actual entrance into the ureter. The depth to which you may carry the instrument is but a poor guide. Many bladders are so elastic as to be carried before it, even so far as the synchondroses. Given a case in which catheterization of the ureter is demanded as a means of diagnosis—and every renal tumor requiring extirpation is such a case—Pawlick's method is too uncertain. Should the patient be a woman, open the base of the bladder, pass your catheter through the urethra, and, by means of your finger passed through the artificial opening, you can always insert the instrument into the canals. You collect urine first from one kidney, then from the other, and are in the only sure position to determine the state of the two organs. Should both be diseased, you spare your patient a fatal operation. Should one be sound, by operating you prolong life.—*New York Medical Journal, September* 13, 1884.

CONSTIPATION HABIT.

The subject of constipation is so extensive, involving the discussion of so many diseases and remedies, and with its diarrhea of literature covering so much ground, that I forbear, for want of time, if nothing more, from entering into a full consideration of the subject.

That it is often a symptom of disease or a disturbance arising from disease, I need not discuss; but I wish, at this time, to call brief attention to it as a disease in and of itself, in order to elicit discussion, and thereby enlarge our ideas.

The constipation habit is certainly a perversion of an important function, and is often productive of great harm and suffering. The normal act of defecation, as a rule, occurs regularly once every twenty four hours, and with a majority in the early part of the day, before or soon after breakfast. In health the call to evacuate the bowels is a peculiar sensation that cannot be misunderstood. If not heeded it may soon cease, and the call not return for an indefinite length of time. Immediately preceding this sensation is the peristaltic contraction of the sigmoid flexure which ejects its contents into the rectum, from which arises the warning and call for voluntary muscular assistance, that is so often unheeded or put off to a more convenient season. But the rectum must be relieved, and if not in the natural way then anti-peristaltic action takes place, and the load is sent back whence it came, a burden and clog, blunting that delicate sense of the bowels.

Women, I think, neglect the function more than men. This is often from a false sense of modesty, their natural delicacy leading them to endure while away from home travelling or in society, rather than to withdraw with eyes upon them to a strange shrine devoted to *Cloacina*. Even at their own homes, where there is a lacking of modern conveniences, the inclemency of the weather, the exposure to cold, and the foul breath of the private vault cause so much dread of the simple act of defecation, as to lead them to procrastinate, to the utter demoralization of the normal defective act. I have no doubt that the trammels of fashionable clothing also interfere to some extent. The considerable straining which is sometimes required to complete the act, may be unattainable from the clothing limiting too much the action of the diaphragm and abdominal muscles.

Sedentary habits which deprive the bowels of the gentle stimulus of exercise, is one cause of constipation; and when to the sedentary habits is added position of posture which cramps and crowds the bowels, as is this case with the shoemaker, habitual constipation is almost sure to follow.

The abuse of cathartics is a fruitful cause to induce and confirm this habit. What with the anti-constipation pill, wafers and pellets flooding the land to dredge the *primæ viæ* on the first indication of its filling up, or to be used from the fear

that it will fill up, it is a wonder that nature's *cloaca* is maintained at all.

Errors of diet, thought not mentioned first, are not least in causing this habit, which is perhaps, more prevalent in this country than in any other; and some one has said that it is because we eat too little soup. Water as a solvent and a dilnent acts in the alimentary canal a very important part, and soup-eating should certainly be encouraged in order to counteract the tendency to take our food too solid, and to favor the fecal current.

Whatever line of diet we are in the habit of taking, and the bowels are normal, if we make a sudden or marked change in our diet, it is often attended by bowel disturbances in one way or the other. I have been in a position to observe a great many persons who have made sudden changes, particularly from a mixed, generous diet, to a vegetarian diet, which from its bulky nature imposes more work on the bowels than they are used to, often beyond their working capacity, and the result would often be acute constipation. The next step then, was to use the much-abused water enema, which to the overworked bowels, seemed a God-send, but by frequent repetition proved a blight to their work, making them a sluggard in the human economy.

I give one case to illustrate:

Mr. S. had been a vegetarian for five years or more, and had adopted two meals a day. He was in fair general health for one of such habits, but his great difficulty was no natural action of the bowels, which had existed for the last five years. His sole reliance for a movement was the coarse food and water enemata, which he had come to take regularly.

He consulted me, ostensibly for hemorrhoids, which he said the doctor who had treated him, told him he had had, and who had expected to operate on him. On making a thorough exploration of the rectum, I was not surprised to find no hemorrhoids, for he gave no symptoms of any. I found, however, a very large, pouch shaped rectum, with flabby, relaxed and attenuated walls, which I attributed to the protracted use of the water enemata.

I changed his diet, stopped the enemas, gave him three meals a day, had him drink four or five goblets of water per day, and had him inject on retiring one-third of a cup of cold water, to be retained. Ordered daily massage and kneading of the bowels, with a mild faradisation of the same; also ten drops of fld ext. casc. sag. four times a day. In four weeks' time he had natural stools, without the use of medicine or treatment of any kind.

A too concentrated diet may cause this habit, but I have observed no danger in this direction. A variable appetite, which makes extremes in quantity and quality of food, is sometimes a cause, but as this would lead us to discussion not intended at this time, we desist. I have often observed that a long journey by rail will produce a severe constipation, and have wondered if the constant jarring of the cars has any thing to do with it.

The more difficult a disease is to treat successfully the longer the list of remedies employed; and, judging from the length of the list in this case, one would be almost discouraged from attempting a cure.

Yet with clear ideas of causes, the indications for treatment are simple, and with the hearty co-operation of the patient the physician may feel quite certain of gaining, sooner or later, the desired result.

The following I give as a general outline of the treatment, which of course must be varied somewhat according to the special indications of each case:

Regulate the diet, having three meals per day of palatable, nutritious food, not too bulky or too concentrated. Have soup at at least one meal each day.

On rising, at least an hour before breakfast, drink one or two large goblets of water. If the stomach is weak and inclined to chronic gastritis, I order the water to be drank hot. Twenty or thirty minutes following the water, give the bowels a thorough kneading for ten minutes. Then assume erect position, with arms above the head and left foot on a line with the right and placed in front of it, bend forward till the knuckles of the closed hands touch the floor, then back to the first position, repeating this five or six times; then, reversing the position of the feet, repeat the movements. This is an excellent exercise for the abdominal muscles and an inactive liver.

At night, also, before retiring, drink a goblet of water, and if there are indications of dryness of lower bowels I use an enema of one-third to one-half cup of water, to be retained.

Flushing the sewer may be a good practice with some, making the stomach the flooding tank; but we must use great care not to interfere with digestion.

When it is available, I often order a fifteen minutes' daily application of electricity to the abdomen, using the Faradic current.

If any medicine is demanded, the first on the list is cascara sagrada. I think it is an excellent "peristaltic persuader." It renders in my hands the most efficient service in small and repeated doses.

I impress it upon my patients to make it a daily practice to go to stool at a regular hour, to induce if possible, by voluntary muscular effort, a movement, remembering that this measure alone, if persisted in, will oftentimes overcome this deplorable habit. Perhaps the best time of the day for this is soon after breakfast. Patient continuation in this line of treatment will do a great deal to dispel this *bête noir* of medical practice.—*Detroit Lancet.*

HEMORRHOIDS

Dr. T. W. Poole gives vent as follows in the *Canadian Druggist*:

The Piles! Ah! I know them well, each feature, though I may not see 'em, Old foes, which fume, and fret, and swell. And set my perineum. You blush at mention of a "pile," and would, perhaps, the theme avoid, well, then, suppose, to put on style, We call the thing a hemorrhoid. Though lingering an unwonted space, it seemed as if they might not part us. When man, as visitors, they came, And took up lodgings in the anus. But now, at each descending bout, The pelvic pains appear distinct, And there can be no longer doubt On their relations with the sphincter. You ask me, by what obvious signs, One may with certainty detect 'em. Well, I can only say that mine Are like a hornet in the rectum, Which, having wandered from the way, And angry at the situation, Stings right and left while yet it may, And tortures one in defecation. "Avaunt! it is a vulgar rhyme." Yet stay, there must be means to cure 'em: Oh, yes, if you but give them time, And meantime patiently endure 'em, There are a thousand cures, you know, All certain sure, as dead shot candy; 'Tis well to buy a score or so, And lay them by to have them handy; And when the hornet's rage is spent, And things assume their wonted quiet, The cure,—though it may not prevent, Will quickly quell the painful riot.—*Medical Age.*

SUB-ACUTE PARENCHYMATOUS NEPHRITIS.

A Clinical Lecture delivered at the Philadelphia Hospital.

By James Tyson, M.D.,

Physician to the Hospital and Professor of General Pathology and Morbid Anatomy in the University of Pennsylvania.

Gentlemen, at our last lecture I presented a case which we recognized as an example of acute inflammation of the kidney, or acute nephritis, or, still more strictly, as acute parenchymatous nephritis. I shall to-day ask attention to a more advanced stage of this affection. The patient is nineteen years of age, and for a year past has lived in the eastern part of this city, working on the docks as a stevedore, from 7 o'clock in the morning until 6 o'clock at night. In August last, he was taken with intermittent fever of the quotidian type. This continued for about two weeks, at the end of which he noticed swelling of the feet, later of the abdomen and finally of the face. Just here let me call attention to the relations which exist between swelling of different parts of the body and diseases of different organs. In the majority of instances, abdominal dropsy is the result of hepatic disease, dropsy of the feet indicates cardiac disease and edema of the face suggests renal disease. This is the general rule, but it is not absolutely without exception. In this case, it is stated that the swelling appeared first in the feet. In this connection I wish also to call attention to the fact that the statements of patients as to the seat of the first appearance of swelling are not always to be relied upon. A man's face may be swollen and the swelling escape notice, but when the feet swell it at once causes difficulty in wearing shoes, and thus attracts attention. Abdominal dropsy may occur in kidney disease, but as a rule only in very severe cases, whether acute or chronic. If there is abdominal dropsy without that of other parts, I think that it may be laid down, as a rule, that the disease is due to this case of some other organ than the kidney.

When this man was admitted, nine weeks after the swelling was first noticed, there was still much edema of the face, abdomen and legs. Examination of the urine at this time revealed numerous tube casts, mainly granular and blood casts.

A few words may here be said in regard to the significence of tube casts. A diagnosis can seldom be made from casts alone, but much assistance is often rendered by their study, so that the use of the microscope becomes of the greatest importance in the recognition of these affections. If there is one kind of cast which is more valuable in diagnosis than any other, it is the blood-cast. Given a typical blood-cast with blood corpuscles in a highly albuminous urine, it can indicate scarcely anything except an attack of acute Bright's disease or an acute exacerbation supervening on one of the chronic forms. There is another cast valuable in diagnosis, and that is the waxy cast. This is a cast which appears as a solid cylinder as though formed of molten wax, but with a yellowish tinge. When this is found, it indicates with great certainty a case of chronic Bright's disease. Epithelial casts with the epithelium slightly altered, or it may be granular but not fatty, are also found in acute nephritis. Granular casts, which are so full of granular matter that when they are viewed with transmitted light under the microscope they appear black, may be found in acute or chronic Bright's disease. So, too, hyaline casts may be found in acute or chronic disease and in simple congestion of the kidney, as in that from heart disease. On admission, as has been said, blood-casts were found in this man's urine, and we therefore know that at that time he had acute Bright's disease.

Let us now study his condition at the present time, which is not less than three months after the beginning of the trouble, nor, if the disease began at the time the symptoms were noted, not over four months after its inception. Examining the lower extremities, we find the barest noticeable pitting on pressure, in the feet; but there is no edema of the legs or thighs. The same is true of the abdominal walls. There is no edema in the upper extremities or face. The circulation is good and the pulse is 84 per minute. The man states that he feels very comfortable and complains of nothing. Examination of the urine is, therefore, practically the only means by which we are able to arrive at a diagnosis. It constantly happens that in chronic Bright's disease there are no indications

of disease except those derived from examination of the urine.

Let us then examine this man's urine, a specimen of which I show to you. As you see, it is pale and evidently of low specific gravity. The urinometer shows that it is 1012, but I expected from its paleness to have found it still lower, even as low as 1005. Urine of low specific gravity associated with swelling of this kind is of more or less significance and means that the disease is of the sub-acute or chronic form. Of course urine of a low specific gravity may be found in other conditions, particularly functional nervous derangements, but in Bright's disease a low specific gravity indicates that the inflammation has passed beyond the acute stage. The application of the ordinary heat and nitric acid test for albumen reveals its presence in considerable quantity. For practical purposes it is sufficient to indicate the quantity of albumen, when small, by the term faint opalescence ; when the quantity is larger, by the term milkiness, and when the quantity is still larger by stating the proportion which the bulk of the precipitate bears to the bulk of urine tested, and for this purpose it is desirable to have a graduated test tube and to set the urine aside for a few hours in order that all the albumen may settle. The albumen will then be said to equal one-eighth, one-sixth, one-fourth, and so on, of the bulk of urine. Let me caution you against a commoner error. Not unfrequently urine which contains one-fourth of its bulk of albumen is put down as containing 25 per cent. of albumen. The expression 25 per cent. means 25 per cent. by weight, but the absurdity of such a statement will be seen when it is remembered that the blood contains but little over 5 per cent. albumen. Urine which contains 5 per cent. of albumen becomes solid on the application of heat. Urine which contains one-fourth its bulk of albumen probably contains about 5 per cent. of albumen. In the present case the urine contains perhaps about one per cent of albumen. Examination of this urine with the microscope shows that it contains hyaline-casts to which are attached a number of leucocytes, granular casts which are both moderately and highly granular and compound granule cells. I do not find on the one hand any blood-casts, and on the other hand I fail to find a single fat cast. The casts which are particularly valuable in distinguishing any variety of disease are wanting. We cannot therefore rely much on the urine in making the diagnosis. I think that acute Bright's disease may however be excluded by the urine examination alone, and independently of the history. There is, however, nothing to show that the disease has passed to the chronic stage. What conclusion therefore is justifiable? This is important, because both the treatment and the prognosis depend on it. From the evidence at our disposal, I should say that this was a case of sub-acute Bright's disease. It is, however, a nice question to decide where to draw the line between acute, sub-acute and chronic Bright's disease. The advance made by some cases toward the anatomical characters of chronic disease is more rapid than in others.

If this man's kidneys could be seen, it would probably be found that they were enlarged, that the cortex was widened and that the uriniferous tubules were filled with desquamated, degenerated epithelium. The kidneys would be pale, because the dilated tubules, taking up more space than in health, squeeze the blood out of the capillaries and because the cells have undergone this degeneration. At the same time, this is not the typical large white kidney in which there are large areas of fatty degeneration. In such cases, the tubules contain not only granular matter, but also large oil drops. In the typical large white kidney numerous white spots, whiter than the rest of the region, are found both in the cortex and on the surface after the capsule has been removed. If these are picked out with a needle and examined with the microscope, they will be found to consist of tubules filled with oil drops. I think that this stage has not yet been reached in the present case.

Even in this stage, the prognosis is comparatively favorable. In the acute stage of Bright's disease it is well-known that the prognosis is quite favorable, for a large majority of such cases, if taken in time and properly treated, will recover. As the case becomes sub-acute the difficulties of treatment increase. In chronic cases the probabilities of recovery are very much diminished. In this case, we may hope that the improvement which has begun will continue.

Before speaking of the treatment I shall refer to the etiology of this particular case. This boy has not had scarlet fever. This is important for by far the greater majority of cases of acute Bright's disease are the result of scarlet fever, and many cases of chronic Bright's disease are due to the same cause. Are there other causes of this affection on which we can lay our fingers? There are a few, and one of these, although perhaps not worthy of the second place, is malarial poison. There seems reasons for believing that the long-continued irritation of malaria is a cause of chronic Bright's disease. At least chronic Bright's disease is more common in intensely malarial districts. I, however, think that it is only in districts where the poison is more than usually intense. This may be said to be the case along the river banks where the patient has worked. Another cause of chronic inflammation of the kidneys is long-continued exposure with frequently recurring wetting of the feet and chilling of the body. Still another cause of this affection is the use of alcohol, but in such cases it is difficult to say how much is due to the direct action of the alcohol and how much to the exposure which necessarily accompanies such indulgence. There are other poisons which, when introduced into the blood are capable of producing this condition. Among these may be mentioned the long-continued use of arsenic and the inhalation of phosphorus to which workers in

match factories are subjected. Cantharides in repeated overdoses may act similarly.

I now come to speak of the treatment. The man has improved much since admission. The dropsy has disappeared and the albumen is diminishing in quantity. Probably the most important lesson which I can impress on you this morning is the fact that there is no direct and specific remedy for this form of Bright's disease. There is no remedy which can be given with the view of acting directly on the condition of the kidney. The treatment must consist therefore essentially, first in placing the patient under such favorable conditions that nature has an opportunity of re-asserting herself and working a cure, and, secondly, in combating the symptoms as they arise.

The patient should be put to bed, protected from the operation of cold, and should have absolute freedom from work. Next to the bed, the best protection against taking cold is afforded by the using of woolen garments next to the skin. The regulation of the diet is important. It is desirable to use food which contains but little nitrogen, for an important danger depends upon the accumulation of urea in the blood. The urea which it is the office of the kidney to eliminate is comparable to the ashes of the fuel by the combustion of which a steam engine is run. It is not, as was formerly supposed, all derived from the wear and tear of the muscular system. Only a trifling portion of the urea arises thus, the greater part being derived from the food. It is evident that if a food which produces little ash is introduced into the system, the labor of the kidney will be diminished. The very best article of food under these circumstances is milk, because there is less ash, so to speak, after the consumption of milk than after the use of any other article of food. After milk come the vegetables. The greatest liberty may be allowed a patient of this kind in the use of vegetable food, provided the vegetables are digestible. Indigestible food must be avoided, for the nervous system of these patients is excitable, and just as a raisin in the stomach of a child may cause a convulsion, so an irritant in the stomach of a patient with Bright's disease may induce the same phenomena.

Meat contains a large quantity of nitrogen. Will you, therefore, take the patient off a meat diet? The answer to this question will depend on circumstances. If the symptoms are as urgent as in chronically contracted kidney, meat should be entirely excluded. A case like the present one need not be entirely deprived of meat, but may be allowed once a day. Oysters, fish, and the white meat of poultry which contains less blood and less urea than the dark meat, are suitable. Eggs, the white of which is pure albumen, should be used cautiously. It has been experimentally determined that if sufficient albumen be introduced into the blood, as by ingesting a number of eggs, albuminuria will be induced, and the amount of albumen excreted will exceed that ingested, showing that it acts as an irritant. I should permit only the most moderate use of eggs in a case like the one before us, and in a case of chronic contracted kidney I should prohibit their use.

We next come to the treatment of the symptoms. If there is no dropsy or retention there is no occasion for diuretics. There is a popular idea that diuretics must be given as soon Bright's disease is diagnosed. A proper secretion is necessary for the elimination of effete matter, and therefore if the urine is scanty, diuretics may be used, but diuretics seldom act unless there is a free action of the bowels. It is therefore more important at first to secure free opening of the bowels than it is to administer diuretics. Such action being secured, we may use to increase the secretion of urine and to prevent the accumulation of urea in the blood, digitalis, acetate of potassium, bicarbonate of potassium or citrate of potassium.

I have already stated that there are no drugs, which by their internal administration can be expected to act curatively on such a kidney. This is correct, but at the same time there is a rational measure which I have sometimes found decidedly useful in acute and sub-acute parenchymatous nephritis, and that is counter-irritation over the region of the kidney. This may be done by means of plasters containing pitch and very little cantharides, the warming plaster of the shops; or, better, by a mustard plaster made by using equal parts of white of egg and glycerine as the menstruums for mixing, instead of water. The objection to the mustard plaster made in the ordinary manner is that it becomes painful too soon, while the object is to produce gentle but continued counter-irritation. A mustard plaster made with one part of mustard to flour of flour and mixed with the equal parts of white of egg and glycerine can be worn almost constantly. And so it should be worn. If at times it causes too much irritation, it may be removed at night and re-applied the following morning.

Cases of parenchymatous nephritis are less subject to uremia than are those of interstitial nephritis. If this should supervene, the treatment recommended in a previous lecture should be adopted. Jaborandi, or its active principle pilocarpin, may be employed. In extreme cases of convulsions, I do not hesitate to bleed. It does no harm to the patient to remove sixteen to twenty ounces of blood, while by so doing you remove a large quantity of the urea-loaded blood which is irritating the nerve centres.

INFANT DIGESTION.

By Horatio B. Bigelow, M.D., Washington, D.C.

The question of infant growth is one of assimilation. Assimilation of food will depend upon the integrity of the digestive function. The digestive system of the new-born is not formulated at once, but develops in logical ratio with the expansion of

other parts of the body. Its measure is the requirement necessitated by the elaboration of tissue. Tissue growth is a slow process, demanding especial nourishment, and varied at each advance in age. The necessities of the child, both chemical and physiological, are not those of the adult, because each is adjusted with great exactness to the immediate environment. The excess of non-nitrogenous matter, which is an essential to adult life, is pernicious to the well-being of the infant. Muscles, when at work, consume principally hydrocarbonaceous aliments, and not albuminoid substances. In the infant there is no muscular exertion, and hence it draws more largely for its development upon the nitrogenous substances than upon the hydrocarbons. At birth the alimentary tract is short, the cæcum being very small, and the masticatory organs are absent. Bidder says that the ptyaline appears only with the cutting of the first tooth. Reasoning from analogy, it is not improbable that the pancreatic and intestinal ferments are also inoperative until about the eighth month. Nature is not a spendthrift, and she would not call into useless action any function not demanded by the necessities of her own handiwork. With the eruption of the teeth a new era begins. Mastication presupposes increased development. Increase of development calls for increase of nourishment, and increase with variety in nourishment sets up new digestive processes, in which the ptyaline and the other ferments play an important part.

The alimentary tract of the infant is exceedingly susceptible, so that nursing women have to be very careful in their diet. Now if this tract is so impressionable as to feel any departure from a standard diet in the mother, how much more seriously will it suffer in the administration directly of unwholesome cow's milk—not unwholesome, perhaps in the light of general use, but unwholesome for the limited infantile digestion. It may have an *acid* reaction, or it may have come from a cow in *heat*, or it may be tainted with certain vegetable substances obnoxious to the child. The natural food of the baby is its mother's milk.

An intelligent study of human milk will lead up to a more just comprehension of the demands of infant digestion, and to a more perfect knowledge of a physician's duty in prescribing for such cases as are, unfortunately, deprived of a mother's breast. It would be a valueless encumbering of space, and an expenditure of time without profit, to cite one-half the analyses that are matters of record. It best subserves the present purpose to view the main constituents of human milk in their relation to certain physiological principles. It is to be noticed first, that woman's milk has an *alkaline* reaction, which persists for an indefinite period, and a specific gravity of about 1.0317. It contains water largely in excess (89.20 in 100 parts), milk sugar, nitrogenous matter, fat, and salines. The albuminoids will vary in different women so largely that we cannot affirm that any analysis is infallible. A fair average percentage would probably be about 4.84. The milk-sugar (6.997) is much greater than in cow's milk (4.92). These figures are only approximately correct. No two samples yielded the same results. This variability in the composition of woman's milk, if not pathological, is a wise dispensation of nature to provide for the exigencies of each month of advancing age. Thus the function of the milk-sugar as a heat-producer is kept constantly in mind, while the absolute rate of nutrition may vary within wide limits, because the bodily heat must be preserved at all hazard. In fat, woman's milk exceeds that of the cow, but falls far below it in albuminoids. The ash, or mineral constituent of milk, is chiefly concerned in metamorphosis. The basic phosphate of soda is invariably found in the blood, while the acid phosphate of potash is the chief constituent of the juice of the flesh. Phosphate of lime is intimately incorporated with the nitrogenous constituent principles. It is very generally admitted that the carbohydrates lead on to fat-production, through the co-operation of the nitrogenous and saline elements. Nitrogenous elements themselves, when in excess, may also serve as a source of fat. Nitrogenous matters do not, probably, undergo complete oxidation within the body; a portion of them is eliminated as urea. Fatty compounds are of higher value as force producers, because they contain a quantity of hydrogen as well as of carbon free of oxidation. Pavy says that the value of nitrogenous compounds as force-producers depends upon the amount of unoxidized oxidizable elementary matter they contain. In human milk the percentage of nitrogenous matter to carbohydrates is about 1.45. About one-fourth part of its case in is coagulable by acid. The *alkaline reaction* is *highly valuable*, since it serves to convert the *casein* into *soluble albuminoids* and soluble carbohydrates, which are great heat-producers. Writing upon this subject, Kuss says: "It is generally admitted (Moleschott, Voit) that an adult consumes 320 grams of carbon and 21 grams of nitrogen, or, in other words, 130 grams of albuminoid elements, and 488 grams of hydrocarbons and fats (fats 84, hydrocarbons 404); it follows that, in this case, the normal proportion in a mixed diet, of nitrogenous to non-nitrogenous aliments, is 1 to 3.7, while in milk, as well as in the egg, the proportion is 1 to 3, or even 1 to 2; in other words, the quantity of albuminates (nitrogen) is much larger, and of hydrocarbons (carbon) much smaller. This fact may be easily explained by referring to the part played by the hydrocarbons in regard to the production of force, muscular force especially. The adult draws his forces from the combustion of non-nitrogenous substances, the albuminates scarcely serving for this purpose. On the other hand, when the organism is in course of development, the nitrogenous substances are indispensable to the growth of the different tissues. It is therefore easy to see how mistaken is the common practice of condemning

children to a diet containing a large quantity of starch and scarcely any nitrogen."

Woman's milk contains no *starch*. It may be conceded that, in the adult, the ptyaline may continue its action in the stomach; that particles of unconverted starch may be transformed by the pancreatic and intestinal juices. In the infant this rule cannot apply. The baby does not secrete ptyaline until the sixth or eighth month, *neither do the other juices, of pancreas and intestine, have any transforming power whatever before that period.* It is sheer ignorance to assert that small particles of starch can do no harm since they undergo transformation in the intestine, when the truth is that they are not only act as irritants, but pass out of the bowels unchanged. The attenuant of woman's milk is an important factor, of which we have little absolute knowledge. It is chiefly in consideration of this point, that *cow's milk cannot ever be safely substituted for that of the mother.* Before it can satisfactorily approximate to this great food of nature, it must be radically transformed by some chemical process, which science has not yet developed. The addition of water to cow's milk will reduce the percentage of albuminoids into harmonious relationship with human milk, but it does not suffice to change the characteristics of the clot. To use starch as an attenuant is, of course, radically wrong.

In view of these facts, it becomes a matter of the utmost interest to establish some definite principles of treatment, in cases where the mother is unable for any reason to nourish her child properly and sufficiently. There is no known process, chemical or mechanical, by which cow's milk alone can subserve this purposes. Up to six months of age, at least, the baby needs just those equivalents found within the mother's breast—nothing more and nothing less. The compound must be *alkaline* in reaction; it must contain no *cane sugar* (because cane-sugar must be first converted into grape-sugar before it can be assimilated; cane-sugar is frequently subjected to a kind of acetous fermentation, producing excess of acids in the infant stomach, so that bodily heat will diminish and disorders of respiration and circulation will follow), and no starch. It must be rich in heat-producers, although, as I have said before, the amount of albuminoids may vary greatly. Position has something to do with digestion. In some bad cases it will be found that, if the infant be placed in the usual position of a nursing child in its mother's arms, that it will assimilate its food, when artificially fed, much more readily. In the nursing child, a by no means inconsiderable amount of heat is derived from the mother's body. An artificially-fed infant is deprived of this, so that there should be some compensatory action in its food. There have been many attempts made to overcome this difficulty, and our journals have been full of discussions upon the matter. It may be said that no artificially-prepared food that does not meet all these requirements will be of permanent value in infantile therapeutics. What is needed is something rich in carbohydrates, with a proper admixture of albuminoids, salts, and moisture, free from starch and sugar, and alkaline in reaction.

In common with many others, I have often been puzzled as to the best way of meeting the emergency. I beg leave to append a few cases from my note book, as bearing upon this matter:

Case I.—K. S., colored, two months old, apparently dying of marasmus, vomits frequently; diarrhœa, with inability to retain nourishment. Was nursed by mother until two months old; then was fed by bottle on diluted cow's milk. Ordered appropriate remedies, with the formula of infant food as advised by Meigs, in very small quantities. On second day the child was no better. Gave small doses of brandy, burned, with sugar; spice poultice to abdomen. Child continues to fail; entire inability to retain nourishment. At the suggestion of a professional friend, I bought a bottle of Mellin's food and subjected it to a very careful analysis. It seemed to be a close imitation of mother's milk—so that I commenced using it at once. The change was immediate and permanent, and the patient is now a thriving girl of four years. The effect was due to the principle in the food which acted upon the curd and albuminoids, and brought the cow's milk into a harmonious relationship with human milk. The whole system of the child was poisoned by unwholesome food, which it not only could not digest, but which was irritating the whole alimentary track. It wanted heat, and it wanted nitrogenous food. I satisfied myself by personal analysis of the constituents of the preparation, and found that it contained the principles which it seemed to me nature demanded, in exact combination, and more satisfactorily and more cheaply prepared than I could compound upon my own prescription.

Case II.—The particulars of this case were furnished me by a friend. A physician was called to see a case where the child had convulsions after each feeding. He questioned the mother in regard to the milk used. She persisted that it was one cow's milk from a fine Jersey on her own farm, and was quite unwilling to make any change. She was finally persuaded to try the milk from another source, and use it with Mellin's food. The child began to improve at once.

Case III.—Entero-colitis. H.D., the infant son of well-to-do parents, in the summer of 1882, had been allowed from time to time small quantities of starchy food in his milk. One night he became restless and irritable, slept but little, and when sleeping moaned frequently. Rejected his food. These symptoms continued for a day or two, when diarrhœa set in. With the increase of inflammation the discharges became more frequent, consisting of small portions of feculent matter, undigested starch, casein, mucus, etc. The abdomen was tender to the touch, and somewhat swelled. Vomiting was troublesome; pulse 148. Ordered

warm baths, poultices to abdomen, with one dose of spiced syrup of rhubarb and paregoric. Then gave a simple refrigerant mixture, with gradually-increasing quantities of Mellin's food. As the child grew better its abdomen was enveloped in flannel, and it was kept in the open air for as long a time as circumstances would permit. It thrived upon this artificial food, and soon was perfectly well.

These cases, which might easily be multiplied, are of interest only as showing that the nearer we approach to the essential principles of normal human milk in any substitution that we may make use of the better will the results be. The general cause of these summer complaints is one of unwholesome or insufficient food. Nature never offers such to her new-born, and we may well pin our faith to her example. Feed the child upon that preparation which assimilates the closest to mother's milk, and little medicine will be required in our cases of so-called cholera infantum.—*Archives of Pediatrics.*

DISEASES OF THE EYE AND EAR.

COLD, HOT AND WARM APPLICATIONS IN DISEASES OF THE EYE.

By Dr. J. Morrison Ray.

In the first stage of granular conjunctivitis, where there is much inflammation, iced cloths are useful, checking inflammation to some extent and allaying irritation. Later on, when this condition becomes chronic with its characteristic hard trachoma granule, there being very little inflammatory action present, hot water is often beneficial, and may even be curative. By frequent applications a certain amount of irritation is aroused, accompanied by a swelling of the conjunctiva and a softening of the trachomatous masses, which tend to hasten their absorption. This can be so regulated as to keep up a continuous slight irritation, and thus often a rapid disappearance of the granulations, without even the use of caustics, which have a tendency to cause cicatricial contraction of the conjunctiva, followed by all the bad symptoms incident to this condition, trichiasis, entropion, etc.

In acute inflammations of the cornea, especially when due to traumatism, iced cloths often give great relief by allaying the pain and limiting the inflammation. In phlyctenular keratitis accompanied by photophobia, which is often seen in badly nourished children, the dropping of iced water on the exposed cornea has been recommended. I have recently seen a case which demonstrates the efficacy of this treatment to a marked degree. The child has been treated by other methods for some time without any apparent benefit. Under the use of iced water, dropped on the forcibly exposed cornea, the improvement was remarkable.

In necrosis of the cornea, occurring in strumous children, non-inflammatory in origin, and without any conjunctival irritation, our chief reliance is in the persistent use of fomentations made of chamomile flowers or poppy-heads.

In abscess of the cornea, accompanied by hypopyon, or the formation and deposit of pus in the anterior chamber, fomentations allay the pain and promote the absorption of the pus. In that form of ulcer of the cornea called serpiginous, occurring at its margin as an ulcerated band with irregular edges with a tendency to spread circumferentially (a condition often seen in old, feeble, and debilitated subjects), and accompanied by considerable conjunctival irritation and a decapillary injection, with often excessive degree of photophobia, rapid improvement sometimes follows the application of heat, moist or dry. The latter is to be preferred as the former produces much swelling of the lids or œdema of conjunctiva. The hot applications may be supplemented by a sol. of sulph. eserine (gr. ¼—gr. j—℥ j) dropped in eye several times a day. This is often used with marked benefit. Careful attention must be given to hygienic surroundings. Exercise in open air several times a day should be enjoyed, during which the eyes must be protected from bright light by means of colored glasses.

The above treatment, if carried out properly, has often succeeded in cases where incision of the base of the ulcer (Soemiesch's incision) has failed. In interstitial keratitis hot fomentations assiduously applied, their effect being carefully watched, together with frequent instillations of atropine, are sufficient to allay the pain and ciliary irritation. In suppuration of the cornea after cataract extraction, especially if it be in a weak and debilitated subject, heat in some form is always serviceable. There is generally considerable chemosis of the conjunctiva and swelling of lids, and in this condition dry heat would seem to be indicated. These eyes are, however, usually doomed, and iced cloths often tend to limit the inflammatory condition; but if this be once fully established, the hot water will promote the suppurative process which ultimately terminates in phthisis bulbi.

In iritis, atropine to dilate the pupil preventing adhesions and putting the eye at rest, and the frequent application of hot water to ally the pain and ciliary neuralgia make an excellent treatment.

Frequently a Turkish bath has a marked effect on these cases. I have often seen a pupil dilate under atropine just after a Turkish bath, which before would give no response to the drug, no matter how persistently applied. Traumatic iritis is the only form which will bear the application of cold, and in this the patients often prefer heat, especially if there is a suppurative process going on in the part.

In inflammation of the deeper tunis of the eye, if accompanied by much ciliary irritation or neuralgia, hot water will be agreeable and often beneficial. In sympathetic inflammations hot poultices

of flaxseed or bread and milk continuously applied for some time has been said to be followed by good effects. Ayers reports a case in which poultices were used almost continuously for four months and with marked improvement in the condition of the eye. In inflammation of the circumocular fibrous and cellular tissue, cold continuously applied for hours at a time will tend to diminish the heat and swelling of the part and relieve the pain. If it be desired to expedite the suppurative process, which often can not be prevented, hot water would be in order. It can be seen from what has been said that no strict rules or rigid laws can be laid down as to the use of these agents. Potent for good in one case, they may produce the opposite effect in another suffering from a similar condition. It would seem that the following would be indications for their use in general: In acute inflammations, followed by much elevation of temperature or swelling of the part, or in any condition where a lessening of the vascular action is required, cold in some form, dry or moist, intermittent or continuous, is indicated, and generally gives the required relief. Where an increase in the blood-supply of a part is desired, or when the vitality is threatened by a slow necrotic rather than an inflammatory process, heat in some one of its modes of application is clearly indicated.—New York.—*Louisville Med. Times.*

A MENTION OF TWO FORMS OF EYE DISEASE FREQUENTLY MET WITH IN CHILDREN.

BY H. F. HANSELL, A.M., M.D.

In a dispensary service in a large city a considerable portion of the patients are children from two to six years of age. Philadelphia, from the comparatively good sanitary surroundings of the poor, with the advantage of separate homes, furnishes fewer examples of filth bred diseases than some of her sister cities, but we "have the poor always with us," and meet with a class of diseases which appertain almost exclusively to them. The causes of the diseases and their *raison d'être* are apparent and require only the briefest mention. The food of the poorer classes is of the simplest kind, consisting chiefly of bread and potatoes, very little meat and as little good milk. The kitchen is the living-room; fresh air is regarded as an unmixed evil and a bath a sure means of catching cold. Clean linen is reserved for Sundays and holidays. Several children are compelled to sleep in the same bed. They eat of the food provided for their elders. Their pennies are spent for candies. The ordinary diseases of childhood are treated by administering five cents' worth of castor-oil and confining the patient to the kitchen, there to breathe the fumes from the father's tobacco pipe and the flavors of boiling cabbage. Simple fevers, colds, etc., sometimes recover with this treatment and occasionally a mild inflammation of the eye gets well, but the tendency is to grow worse, and a simple conjunctivitis passes into a chronic form and other tissues become affected.

The two forms of eye diseases to which I wish to call attention, both on account of their frequency and their destruction of function, are Phlyctenular Keratitis and Superficial Vascular Keratitis. The diagnosis between them is sufficiently easy. The former is characterized by the development on the cornea of one or more blebs *with vessels running directly to them.* These blebs have their seat in the anterior layers of the cornea, and consist of a circumscribed minute collection of serum underneath the epithelium and elevating it. The conjunctival vessels involved are the superficial and episcleral and on the surface of the cornea are new vascular formations running directly to the phlyctenulæ. In a few days the vesicle ruptures leaving an ulcer which gradually entirely heals without a persisting scar.

Superficial vascular keratitis, however, is a much more important and disastrous affection, and from the very outset demands skillful attention and patient nursing. It is characterized by an irregular superficial inflammation of the cornea, which either in the very beginning or later is accompanied by the formation of new blood vessels. The symptoms common to all the forms of inflammation of the cornea are prominent. The photophobia is especially conspicuous. The patient buries his head in his mother's lap or in a pillow. Lachrymation is less than in conjunctivitis. The cornea, overhung by the swollen upper lid, is in great part opaque. There may be several patches of opacity or one large irregular patch, the result of the merging of smaller ones; the epithelium is lost, hence the surface is rough, and it is inlaid with vessels. These vessels spring from the pericorneal ring, are new formations, and lie directly on the surface; they have no particular direction or stopping place, but traverse the entire cornea. Children affected with this form of keratitis are said to be scrofulous, and many show the external marks of that diathesis—flat-nose, large pouting lips, decayed teeth—but many others show no such signs. They are simply ill-nourished and ill-cared for. Their digestive organs being abused refuse to properly carry on their functions, and the lower part of the alimentary tract becomes the abiding place for worms, the existence of which should be inquired into, because of its therapeutic importance. Cases of keratitis which have persisted for months and years, going the rounds of the dispensaries, begin to recover only after the effective administration of an anthelmintic. The possibility of the reflex nature of this disease is too often overlooked. We are inclined to fall into routine practice and order iron, quinine and cod-liver oil, without a thought of digestion and assimilation. "Scrofulous" and "malarial" are convenient terms, and are often used to cover our ignorance and want of thoroughness. The patient is thin, pale, fretful, restless, and a disease once

manifesting itself hangs on a long time, but there is seldom positive evidence of scrofulous, phthisical or syphilitic taint. Superficial vascular keratitis is essentially different from the syphilitic form known as "keratitis ex lue" (Arit.)

Treatment.—Phlyctenular keratitis Among the first remedies is a purge, unless the bowels are regular and symptoms of worms are wanting. One of the best is calomel in quarter-grain doses, repeated every three hours, until twelve doses are taken, and if an anthelmintic is needed the following combination is frequently prescribed at the Polyclinic :—

℞	Hydrarg. Chlor. Mit.,	gr. iv.	
	Santonin,	gr. j.	
	Sacch. Lac.,	q. s.	M.
	Ft. in Chart. No. iv.		

Sig.—One every hour.

The first powder is to be taken at 10 a.m., and no food allowed until all are taken. If the bowels are not freely opened the last powder is to be followed by a dose of castor oil. Then the patient is put upon the following mixture :—

℞	Syr. Ferri Iod.,	f ℥ ss	
	Ol. Morrhuæ,	f ℥ iiss.	M.

Sig.—Teaspoonful t. d.

Locally. Atrop., Sulph., gr. j-f ℥ ss, to be instilled once daily, and Pagenstecher's ointment at night—

℞	Hydrarg. Ox. Flav.,	gr. j.	
	Vaselini,	ʒ j.	M.

Superficial vascular keratitis. The constitutional treatment is the same as above.

Locally. Atropine solution three times daily, after bathing the eyes with *very hot water*. Pagenstecher's ointment at night, and a daily application to the upper and lower lid of—

℞	Acid. Tannic.,	ʒ j
	Glycerini,	f ℥ j.

The more frequent use of atropia is here advised on account of the hyperæmia of the iris, which might readily pass into a chronic iritis.

Duration of phlyctenular keratitis, one to two weeks—of superficial vascular keratitis, one month to a year.

The prognosis is good in both.—*Phil. Polyclinic.*

THE TREATMENT OF TYPHOID FEVER.

Dr. S. K. Jackson (*Med. Times*): The author contended that the discussion of this subject, though trite and hackneyed, could not be considered as finished until there was a better agreement among physicians as to the treatment of this disease, or until the mortality occasioned by it was much reduced.

The object of the paper was to point out a line of treatment suggested by a recognition of some pathological conditions long since known to exist, but which had been ignored in looking for indications for treatment. That these conditions have been overlooked is evidenced by the many and conflicting modes of treatment that have at different times been proposed, means not only not called for, but actually injurious. Some of these were enumerated to show that the pathology of the disease could never have suggested them. While all this conflict was being urged, the doctor declared that he had been pursuing one plan of treatment for 35 years, from which he had no reason to deviate, and that it did not contain one of the long list of means to which he had previously referred, and which are generally employed in the treatment of this disease. He was reluctant to state the result of that treatment, but left each one to determine its value for himself.

Among the first and most prominent pathological conditions which had attracted the attention of the author was the nitrogenous waste, the diminution of fibrine, the deficiency of urea and of all the nitrogenous excretions. The fact that they are not excreted is no proof that they are retained in the system, for if they were there would be signs of uræmic poisoning, which no one claims to have seen. They are not excreted, because there are none to be thrown off. One cause of the nitrogenous deficiency is the inability to digest nitrogenous food, which is owing to the absence of the digestive fluid, and this cannot be secreted because of the congested and inflamed condition of the glands and glandular follicles whose duty it is to secrete these juices. Another possible but not probable cause is the consumption of nitrogen by the parasitic organism, which is the acknowledged etiological factor in the production of enteric fever. That the parasite is a nitrogen-feeder is proved by the fact that it lives and thrives in nitrogenous matters, in urea and all nitrogenous excreta. Old logs, rotten wood, and leaf-mould, saturated with these excretions, have been known to be fruitful sources of this fever. If further proof be needed, it is found in the ammoniacal exhalation from a typhoid fever patient from his breath, his skin and his urine. These exhalations are undoubtedly due to the decomposition of the nitrogenous constituents caused by this micro-organism.

This pathological condition furnishes the most important indication in the treatment of this disease. As this nitrogenous waste cannot be supplied by nitrogenous food, the author knew no way of accomplishing this object but by the free administration of ammonia, even to saturation. Fortunately this nitrogenous base furnishes us with salts of such different therapeutical powers as to enable us to select any one suited to any stage of the disease and to any condition of the system. We have in the nitrate of that base the most sedative salt that we possess, and in the carbonate the most stimulating salt of the materia medica. The nitrate of ammonia is capable of reducing the typhoid fever heat down to 102° F., and of keeping it there. As this is not a dangerous de-

gree, the patient is safe, so long as it can be maintained. Ten or twelve grains of the salt every two hours is sufficient for this purpose.

As the disease progresses, and there is less need for a sedative, or if diarrhœa supervenes, the acetate of ammonia is substituted for the nitrate, and acetate of lead and opium are at the same time administered.

If nervous symptoms show themselves with a failure of the vital powers, the carbonate of ammonia in combination with potassium chlorate is resorted to; but if coma develops, recourse is had to the hydrochlorate of ammonia, generally in five grain doses, every two hours. The effect of this is magical. The doctor stated that he had never seen coma in a case which had been treated from the beginning with this ammoniacal course, and had only seen it in badly-nursed cases, or in those treated by other means.

He considered the delirium of typhoid fever to be due to deficient nourishment, a delirium of starvation. It never fails to become quieted in a few hours after the free administration of ammonia. Wandering sometimes occurs if the dose is too small or the intervals between are too long. Patients sometimes ask to have the intervals shortened on account of a confusion of intellect, which appears when the dose has been postponed too long.

For tympanites, turpentine is used by enema or by the mouth.

The pathological condition contended by some to exist in, and be the cause of coma, is a thickened condition of the envelopes of the blood corpuscles, on account of which the brain fails to be nourished, even though the blood contains the normal amount of nourishment. This condition suggested the hydrochlorate of ammonia as a solvent for the thickened envelope; but whether this be its *modus operandi* or not, its effect is almost miraculous. Thus it will be seen that there is no stage of the disease in which one or other salt of ammonia is not used.

Why should cold baths and affusion be used when the temperature can be reduced by simpler and safer means and without the danger of reaction? The author long since abandoned quinine as not being the proper germicide for the typhoid-fever parasite. It is, however, the antidote *par excellence* for the malarial poison, but, as the typhoid fever producing organism differs so essentially from that of malarial fever, it could not be expected that the same agent would destroy both. The parasite of malarial fever is a carbon-feeder, and that highly carbonaceous medicament, quinine, might be expected to be the best agent for destroying it, in accordance with the law (for which the doctor has been contending), viz., "that no organism can live in its own excreta, in the results of its life processes." If carbonic acid gas be thrown off as the excretory product of a life process, a saturation of that gas will check the process and destroy the life. If alcohol be the result, then alcohol is the proper agent to destroy the organism causing it. If sulphuretted hydrogen be evolved, then the compounds of sulphur are the most efficient means of checking the process. So, then, when ammonia is the excretory product, as in typhoid fever, ammonia, as has been shown, is the most efficient germicide. This furnishes us with an additional reason for employing the salts of ammonia, for this nitrogenous base not only supplies the nitrogenous waste but also destroys the vitality of the organism which causes it.

If this be a law, instead of accounting for the protection of the system against a second attack of contagious zymotic diseases by supposing that it is due to exhaustion of the pabulum necessary for the support of the parasite, why not attribute it to the infusion into the system of some excretory product which forever acts as a poison to the parasitic organism? This is the most probable explanation.

With regard to the period of this fever. If it is recognized as early as the third day, it may subside at the end of the first septenary, but if not recognized before the fourth or fifth day it cannot break before the end of the second septenary, but may at that time. If the treatment has not been inaugurated before the beginning of the second septenary the fever cannot be made to yield before the end of the third septenary (the 21st day). That it will yield on that day is almost an absolute certainty.

With regard to the diet, nothing is allowed but milk. Farinaceous preparations are never admissible. They cannot be digested for want of the fluids containing diastase. There cannot be any conversion of amylaceous food into dextrine or grape sugar, so then starchy food cannot be assimilated. If administered, they undergo a fermentation which adds to the gaseous distention and greatly complicates the case.

Animal broths are never allowed until the later stages of the disease, or until there are signs of the secretion of the digestive fluids.

In conclusion the doctor said, "The limited time allowed for this paper has compelled merely an outline of a subject which deserves full discussion. It is left to the profession to test the value of the treatment which has been detailed.—*Maryland Med. Jour.*

NEW HEMOSTATIC AGENT.

Dr. Spaak employs two parts of chloroform to 200 parts of water as a hemostatic in operations on the mouth and throat, and claims that patients thus treated suffer but slight hemorrhage.

He also uses the chloroform water as a spray after excision of the tonsils. This chloroform water seems to close the open mouths of all small blood-vessels instantly.—*Journal de Medicine*, Brussels, Belgium.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, SEPTEMBER, 1885.

LOCAL AND GENERAL.

In a recent magazine story an overworked literary hack tells how the "demon of unrest" pursued him day and night like the monster in "Frankenstein." Many a worried doctor has doubtless a similar experience; when he has got to the end of his tether he goes about as in a dream, conscious that he is awake, but only partially awake. Our hot summers probably contribute to this effect; and the victim of insomnia and irritable nerves longs for the country and rest. The absolute necessity for a change and rest is the reason why the matter under the above heading has been wanting for some months past. Now that cooler weather goes along with a quieter brain I hope to do a little more writing.

The topic that, above all others, occupies our local medical world is the variola epidemic.

Starting from the Hotel Dieu as a centre it has gradually spread all over this fair city of ours until we are generally regarded by outsiders as a pest-house on an extended scale. Whether there is as much cause for outside alarm as the Boston and New York papers would have us believe is a question, but there can be no doubt but that the city trade is seriously and decidedly affected by it, travel has greatly fallen off, the hotels are almost deserted, and nobody comes near the place who can possibly help it.

I do not propose here to raise the old question as to whether the responsibility for this unfortunate state of things properly lies with the attending physicians at the Hotel Dieu who first saw it there or with the authorities whose duty it was to isolate and disinfect the first fruits of somebody's blunder, but I consider it only right to point out that the present state of things is just what might have been expected from the half-hearted and entirely inadequate measures resorted to throughout the battle with the disease. There is no use now as far as the *speedy* elimination of the disease is concerned, to isolate, vaccinate, and clean up.

The colt is escaped from the stable, and it matters little whether we close the doors or not.

The time for accomplishing *that* object is gone by forever.

That the weekly number of deaths may be lessened, and the disease confined to the unvaccinated and imperfectly protected is quite true,—that may be done,—but those of us who have watched the progress of previous epidemics know perfectly well that when the number of small-pox patients exceeds $\frac{1}{10}$ per cent. of the population and the area of the disease is the area of the city that the pestilence will not be stayed until all the inhabitants capable of being infected will have been infected.

Those who feel inclined to question that statement would do well to inform themselves regarding the epidemic of 1876-78, and they will find an almost exact parallel in the present one. They will find that the measures, precautionary and other, taken at that time followed leisurely behind that out-break, just as they now do. They talked about opening the civic hospital when it should have been in active operation; they began to vaccinate in a feeble, doubtful sort of way when vaccination should have been in full blast in every city, ward, and in every outlying municipality.

In a half-hearted style they attempted to isolate patients when they should have insisted upon it as if their very lives depended upon its success. They, after weary months of talking, decided that a Board of Health was a good thing for a city, and they conceived the novel notion that this Board should have power sufficient to overcome the prejudices, cupidity and ignorance of the unclean, whether living in high places or not, when such a Board should have been instituted at the very outset. In short, they went tiger-hunting with pop-guns and the wild animal, *more tigri*, turned and feasted on their flesh and blood until he slept from repletion.

But is this suffering all for nothing? Are we to go on in this way, having the usual quinquennial visitation of small-pox, or is there, I ask, balm in Gilead? Regarding measles and scarlet fever and whooping cough a decided answer is possible —we know that we shall have periodic visitations of these maladies; we know that with the fresh renewals of our population will come, for a time at least, fresh crops of morbilli, scarlatina and pertussis, but of variola is this also true? Not necessarily so; with the proper machinery ever ready to be set in motion, a vigilant Health office, a decently intelligent and thoroughly vaccinated population, small-pox can be kept under as surely as fire or dead cats or murder. Whether we shall have during the years 1891-92 another epidemic of small-pox depends as much upon the factors mentioned above as the probability of fire depends upon the existence of an efficient fire department.

Those optimists who see the likelihood of such a radical and sudden change occurring in the habits of the unvaccinated and dominant portion of our population may look forward to the extinction of variola epidemics in this city. Those who regard such a change as possible only as a part of a movement which shall greatly modify the social, political and religious life of this element may not be as sanguine. Personally, I am not sanguine.

All eyes are now turned towards the newly-created Provincial Medical Board. Having at its head the man who, above all others, has preached the benefits of vaccination it is confidently expected that compulsory vaccination will form one of its first projects. Composed of practical hygienists we expect all those schemes to be at once set in operation whereby the baneful effect of the epidemic can be largely neutralized. These things we have a right to anticipate, and, if the outside localities are not immediately *compelled*, at their own expense, to do what they ought long ago to have done voluntarily, the public, lay and professional, will hold them to a strict account. They have the power to do the proper thing, and their failure to do it can only be regarded as, in the highest degree, culpable.

My experience of vaccine has been large. I have used, I believe, samples of every kind that has yet been brought into Montreal, and some that I trust never will be sold here, and I think my successes and my failures have made it possible for me to say with positiveness that vaccinating in hot weather with vaccine brought from a distance is a delusion and a snare. I will never do it again, for I believe that it has done the cause (it is a "cause" in this city) a great deal of harm. It is difficult to persuade people of the utility of being vaccinated after the third or fourth failure, when they have been taught that two or three failures is sufficient to insure immunity from the disease. During the cold months I hope to vaccinate all but a small fraction of my patients that shall require it. We ought to have a properly conducted vaccine farm here, and I believe it would pay. During the next year or two (while King Variola holds sway) not less than 1,000,000 points will be required for Montreal and its surrounding country, and probably $75,000 will be paid for vaccine. Might not some enterprising Canadian have this money as well as the establishments of our American cousins? Surely its greater reliability would give such lymph an immediate sale, to the exclusion of outside competitors.

The dreary fight over the International Medical Congress still goes on. The new Committee met in New York Sept 3rd, and filled the large number of vacancies occasioned by those who declined to co-operate with them. It is a great pity that something was not done at the meeting to heal the breach that widely separates them from so large and influential a section of the profession in America. It will also be a matter of much regret if the American Medical association at its next meeting in St. Louis cannot persuade its members to sink their differences in an united effort to welcome their transatlantic brethren who are not concerned in the Medical politics of the United States.

P. A. LAVER, M.D.

MONTREAL, Sept. 18, 1885.

A young woman named Carmen Rodriguez from Pachuca (Mexico) is on exhibition in this city (Mexico); her height is two metres and eight centimetres, or six feet nine inches. Age 26. Weight twenty *arrobas* or five hundred pounds. Her colossal stature is a sight to see.

A well-known surgeon of ability, who was famed for his brusque and brutal manner, was called to see a rich, but miserly patient, suffering from cancer in the stomach. The patient's condition was

very serious, but the idea of a large fee troubled him sorely.

"Doctor, how much will you charge me?"

"Not a cent."

"Ha, ah! thank you, Doctor."

"Your heirs will pay me," said the Doctor.

The Military Journal of Saint Petersburgh publishes a Ministerial decree, ordering that the 2nd, 3rd, 5th and 8th Battalions of Siberian Chasseurs, shall have a midwife on the staff. Their salary will be three hundred roubles, with an additional allowance of one hundred roubles for messing.

In the *Bulletin Generale de Therapeutique* Dr. Pecholier points out the remarkable fact that the half-dozen drugs generally regarded by physicians as "specifics" are all of them no more nor no less than germicides. Such a conclusion, if fully demonstrated, would be considered strong confirmatory evidence in favor of the germ theory of disease. The specifics named by Pecholier are iodine, mercury, quinine, sulphur and arsenic.

The *Gazette Hebdominaire des Sciences Medicales* of Bordeaux publishes a remarkable article from the celebrated Dr. Picot, in which, after a thorough investigation of the experiments and discoveries of Dr. Ferran, he declares himself a convert, and warmly eulogizes him.

THE MARSEILLAISE.

The following has been composed by an idle Frenchman, to be sung to the well-known air as above:

Allons, enfants, de la patrie,
Le petit microbe est arrivé,
Contre nous de la bacterie
L'étendard sanglant est elevé [*bis.*]
Au phenol, citoyens!
Vive les fumigations!
Dèsinfectons! Dèsinfectons!
Que laudanum abreuve nos sillons.

PERSONAL.

Dr. Wolfred Nelson left the Isthmus by the *Acapulco* for New York. The doctor has been a resident of the Isthmus for five years, and has devoted much attention to diseases of the climate, and particularly to yellow fever, that scourge of the Tropics. Dr. Nelson goes to New York to accept the position of Medical Inspector of the New York Life Insurance Company for the West Indies and Spanish America.

REVIEWS.

Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects, Vol. VI. Heastie-Insfeldt. Washington, Government Printing-Office, 1885. Pp. 1051.

The sixth volume of this handsomely-printed catalogue completes the work to and beyond the ninth letter of the alphabet, and includes 7900 author-titles, representing 2543 volumes and 7250 pamphlets. It also includes 14,590 subject-titles of separate books and pamphlets, and 35,290 titles of articles in periodicals. The total number of book-titles contained in the six volumes which have appeared is 64,142, and of the journal articles 219,154. In arrangement of matter and general appearance the volume corresponds with former issues of the series, which reflects honor upon American medicine.

A Complete Pronouncing Medical Dictionary, Embracing the Terminology of Medicine and the Kindred Sciences, with their Signification, Etymology and Pronunciation. By JOSEPH THOMAS, M.D., LL.D., etc., 1 vol. large 8 vo. pp. 884. Philadelphia: J. B. Lippincott Company, 1885.

There has been real need of a work of this kind, and after a careful examination of the manner in which the author has performed his laborious task we have no hesitation in saying that he has succeeded in presenting a medical dictionary, which, for the daily use of the student or the practitioner, is superior to any other in the language. He is especially careful in assigning the derivation of the words, their accents and pronunciation, and their exact meaning according to the usage of the best modern writers. In the preface he explains how extremely difficult at times this is, owing to the absence of any recognized standard of Latin pronunciation or of English spelling, and every editor and lecturer will be prepared to appreciate what he says on these points. Through the assistance of specialists in various branches of medicine and pharmacy he has been able to add all the recent introductions to the phraseology and nomenclature of medicine, surgery, pharmacy, chemistry, and the allied sciences, and in this respect the work stands a long way ahead of any that has yet been issued.

The typographical display of the words and their definitions is exceedingly judicious, and the paper and sizes of type leave nothing to be desired on these heads.

An appendix is added to the volume, giving the most essential elements of Latin grammar, the most usual Latin terms found in medical writings, abbreviations employed, scales of weights and measures, doses of medicines, etc. These are conveniently and clearly arranged, and enhance the value of the volume.

Asiatic Cholera:—A Sketch of its History, Nature, and Preventive Management, is the title of a little pamphlet by OSCAR C. DEWOLFE, A.M., M.D., Commissioner of Health, Chicago, Prof. of State Medicine, Chicago Medical College.

The author would seem to be behind the times when he states that the poison in a dry state may be preserved in definitely, and few will agree with him that the discharges are not infectious immediately after their ejection from the patient.

Some useful hints are given in relation to the prevention of the cholera and the care of the sick.

A Hand-book of Pathological Anatomy and Histology, with an Introductory Section on Post-Mortem Examinations and the Methods of Preserving and Examining Diseased Tissues. By FRANCIS DELAFIELD, M.D., Professor of Pathology and Practical Medicine, College of Physicians and Surgeons, New York; and T. Mitchell Prudden, M.D., Director of the Physiological and Pathological Laboratory of the Alumni Association of the College of Physicians and Surgeons, New York, etc. New York: William Wood & Co., 1885. Pp. xvi-575.

Although this is a second edition it is essentially a new work, as its scope has been very much extended by the many valuable additions made to it, and is intended to supply all the needs of students and practitioners who wish to add a knowledge of the lesions of disease to that of its clinical symptoms.

Part I. Gives directions for making post-mortems and how to prepare and prescribe pathological specimens.

Part II. Embraces a wide range of subjects:—Changes in the blood—Degenerations—Animal Parasites and Bacteria—Inflammations—Tumors.

Part III. Morbid anatomy of the organs, including bones and muscles.

Part IV. Lesions found in general diseases; in poisoning and in violent deaths.

The matter of the work is excellently arranged, and, although somewhat concise, yet nothing important is omitted. The drawings by the authors are well executed and the general appearance of the volume attractive. This book will be found extremely useful to the practitioner as well as to the student and is of more real value than many of the numerous text books now published.

Clinical Charts: Designed for the Convenient, Accurate and Permanent Daily Recording of Cases in Hospital and Private Practice. By J. C. WILSON, M.D., Physician Philadelphia Hospital, etc. Published by J. P. Lippincott Company, Philadelphia. These charts are very convenient to the busy practitioner, as he can enter at once at the bedside important clinical facts and memoranda, thus preserving in sufficient detail, and with little trouble, valuable records of each case. They are put up in blocks of 50 charts, for fifty cents.

Urinary and Renal Derangements and Calculous Disorders. Hints on Diagnosis and Treatment. By LIONEL S. BEALE, M.D., Prof. of the Principles and Practice of Medicine, King's College, London, England. Philadelphia, P. Blakiston, Son & Co., 1012 Walnut St., 1885. Price, $2.00. Montreal, Dawson Bros.

Like all of Beale's writings the book is valuable for the amount of solid information which it contains and makes it a necessary addition to the physician's library. Commencing with the therapeutical indications of the use of acids and alkalies sound advice is given concerning their administration.

In the division relating to urinary deposits, to which too little attention is given by the students, we have all those facts which daily come under the notice of the painstaking physician, and which, with the other clinical conditions, aid in the diagnosis of disease; of substances not found in healthy urine, such as albumen and sugar, a complete resume is given, with very full directions regarding diet, treatment, etc. The concluding division, on calculi and calculous disorders, concludes this interesting and practical volume.

The undermentioned works have been sent to the RECORD for review, owing to circumstances this could not be done in the present number, but due notice of them will be given in our next.

Minor Surgical Gynecology. By P. F. Mundé, M.D.

The Climate of Canada. By W. H. Hingston, M.D.

Wood's Library—Six volumes, including, Human Osteology, by Haldane. Kirk's Handbook of Physiology, Vol. I and II. Asiatic Cholera, by Wendt. Wasting Disease of Children, by Smith. Poisons. Vol. I, by Blyth.

Hay Fever and its Successful Treatment. By C. E. Sajous, M.D.

Nasal Catarrh and allied Diseases. By Beverly Robinson, A.M., M.D.

PAMPHLETS RECEIVED.

Tabular Statistics of 100 Cases of Urethral Stricture Treated by Electrolysis. By Robert Newman, M.D.

Illustrated Catalogue of Surgical Instruments. Caswell, Hazard & Co.

Vaginal Hysterectomy for Cancer. By A. Reeves Jackson, A.M., M.D.

Duty of the State towards the Medical Profession. By Conrad George, M.D., Ann Arbour, Michigan.

Cholera Infantum. By W. P. Watson, M.D., reprinted from the "Archives of Pediatrics," Aug., 1885.

Cholera—Its Nature, Symptoms, etc., with an Outline Review of the Germ Theory of Disease. By J. B. McConnell, M.D.

Supplement Kansas Law Journal, containing Prohibitory Law, Pharmacy Law and Dentistry Law.

THE THIRD ANNUAL MEETING OF THE AMERICAN RHINOLOGICAL ASSOCIATION

Will be held at Lexington, Ky., October 6th, 1885. Papers and Discussion will be devoted exclusively to the Diseases of the Nasal Passages and their sequences.

Officers for 1885.

President, P. W. Logan, M.D., Knoxville, Tenn.; *1st Vice-President*, A. DeVilbiss, M.D., Toledo, Ohio; *2nd Vice-President*, J. A. Stucky, M.D., Lexington, Ky.; *Recording Secretary*, C. A. Sims, M.D., St. Joseph, Mo.; *Librarian*, N. R. Gordon, M.D., Springfield, Ill.

Council.

J. G. Carpenter, M.D., Stanford, Ky.; H. Jerard, M.D., East Lynne, Mo.; H. Christopher, M.D., St. Joseph, Mo.; E. F. Henderson, M.D.; Los Angelos, Cal.

Information concerning the full Programme, Membership, Papers, Attendance, etc., may be learned from any of the above Officers of the Association. C. A. S. SIMS, M.D.

AMERICAN RHINOLOGICAL ASSOCIATION.

The following are the subjects of some of the papers (with the authors' names and addresses) to be read at the 3rd meeting of the American Rhinological Association, *to be held at Lexington, Ky., Oct. 6th*, 1885:

Address to the Association on Rhinology. By the President, P.W. Logan, M.D., of Knoxville, Tenn.

Chronic Otitis Media, its Treatment in Connection with Nasal Disease. By Hiram Christopher, M.D., of St Joseph, Mo.

Self-Deception. By the same Author.

Hypertrophic Rhinitis; its Sequelæ and Treatment. By J. A. Stucky, M.D., of Lexington, Ky.

Treatment of Catarrh, Acute and Chronic. By A. DeVilbiss, M.D., of Toledo, Ohio.

Treatment of Neoplasms of the Naso-pharyngeal Cavity. A New Snare. By J. G. Carpenter, M.D., of Stanford, Ky.

Aural Catarrh and Treatment by Different Methods, with the Theory of each System. By Chas. A. S. Sims, M.D., of St. Joseph, Mo.

Chronic Conjunctivitis Dependent upon Intra-Nasal Disease. By N. R. Gordon, M.D., of Springfield, Ill.

Demonstrations (on the Cadaver) of the Nasal and Pharyngo-nasal Cavities, the Pharynx and Larynx. The Sections of the Cadaver will show all the Cavities, Canals and Sinuses connected with the Nasal and Pharyngo-Nasal Cavities. By Thos. F. Rumbold, M.D., of St. Louis, Mo.

Demonstrations of the Manner of Making Applications by means of the Spray Producers; the age of the patients being, respectively, 1, 3, 8, 15 and 20 years and older. By the same Author.

Removal of Foreign Bodies and Tumors from the Upper Air Passages, with Demonstrations on a Phantom Head. By the same Author.

Treatment of Pruritic Rhinitis [Hay-fever], by Spray Producers alone; Cases. By the same Author.

On the Treatment of Secondary and Tertiary Syphilis of the Larynx, Pharynx and Mouth. By Jos. B. Payne, M.D., of Hot Springs, Ark.

A few Suggestions on Hypertrophy of the Turbinated Processes. By E. F. Henderson, M.D., of Los Angelos, Cal.

Seven other Papers are promised, but the subjects have not yet been given to the Secretary.

The full Programme will be ready to mail to any address on and after the 23rd of Sept., on application to any of the above members, or to Chas. A. S. Sims, M.D., *Secretary, St. Joseph, Mo.*

THE

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THE QUESTION OF PROSTITUTION AND ITS RELATIONS TO THE PUBLIC HEALTH.

By CASEY A. WOOD, C.M., M.D., M.C.P.S.O., Attending Physician to the Western Hospital, Professor of Pathology in the Medical Faculty, University of Bishop's College.

The revival of the old question—what shall we do to prevent the spread of syphilis?—seems probable. Twenty years ago the advisability of adopting restrictive measures in the treatment of prostitution was discussed with some warmth. The majority that carried the Contagious Diseases Act and that applauded the licensing system is dwindling down, and the belief gains ground that it is more by indirect and moral means that the desired object is to be attained than by legislative measures.

Several papers lately written, notably that by Drs. Allison and Ashton ("The Failure of Legislation in Limiting the spread of Venereal Diseases," read before the Philadelphia County Medical Society, April 22nd, 1885), will be likely to provoke discussion of the whole question. The following article is reprinted as a contribution to such discussion, and as the writer has not since seen fit to change or modify views expressed when it was first written (November, 1880) it is given entire, without further apology.

Whatever action may be taken regarding them by the people at large, whatever influence may be subsequently exerted by public opinion, questions of hygiene are primarily the property of the medical profession. For example, it is rarely that we have to thank the priest, with his time occupied with matters of another world, and caring little for things of earth; nor the statesman, with his attention taken up by affairs apparently more important; nor even the laity, who have ever exemplified the proverb, "what's everybody's business is nobody's business"—we have seldom been indebted to any of these for the inauguration of whatever progress has been made in a single department of sanitary science. No fact could add more to the dignity of our profession, because, in consequence, it must prove to all candid observers that, as a rule, medical men really hope and work for a permanent lessening of the diseases that infect the race.

The statement that the primary discussion of any measure to improve the health of communities and individuals has almost always been introduced by medical men might be supplemented by showing that the conclusions arrived at by them have always formed an important factor in determining action taken by the authorities to remedy the trouble under consideration. It is a fortunate circumstance, perhaps, that such is the case in the questions about to be ventilated in this article, for the same spirit of false modesty which prevents a proper discussion by the laity of many a vital question affecting the social economy has relegated the treatment of prostitution and its attendant evils to whomsoever cares to occupy himself with it. With this double warrant there can be no reason why the matter should not be freely and fully discussed in the pages of a medical journal, no reason why the medical scientist should not decide what measures will have the greatest influence in

limiting the spread of prostitution and in neutralizing those moral and physical maladies it so uniformly gives rise to.

"*Fornicatio autem——nec nominetur in vobis sicut decet sanctos*," wrote Paul to the little church at Ephesus, but probably he never imagined that in later times a whole people would arise who, while tacitly ignoring the spirit, would scrupulously insist upon its *literal* obedience! But only in these latter days, for, "in the good old days when George the Third was king," Fielding was the popular novelist, and everyone read and openly discussed the questionable ways and doings of his heroes and heroines. Nobody then saw harm in reading Richardson (who, by the way, was a clergyman), nor is it probable that any great harm came of it because of that very fact. There were no "expurgated" editions of Shakespeare then, because it was held that to call a "spade" by any other than its proper name was quite unnecessary and likely to mislead. The author of "Vanity Fair" frequently draws one's attention to this change in public sentiment. For instance: "Ladies, I do not say that you are a society of vestals,—but the chronicle of a hundred years since contains such an amount of scandal that you may be thankful you did not live in such dangerous times. No, on my conscience, I believe that men and women are both better; not only that the Susannahs are more numerous, but that the Elders are not nearly so wicked. Did you ever hear of such books as 'Clarissa,' 'Tom Jones,' 'Roderick Random;' paintings by contemporary artists of the men and women, the life and society of their day? Suppose we were to describe the doings of such a person as Mr. Lovelace, or my Lady Bellaston, or that wonderful 'Lady of Quality,' who lent her memoirs to the author of 'Peregrine Pickle." How the pure and outraged nineteenth century would blush, scream, run out of the room, call away the young ladies, and order Mr. Mudie never to send one of that odious author's books again! You are fifty-eight years old, Madam, and it may be that you are too squeamish, that you cry out before you are hurt, and when nobody has any intention of offending your Ladyship. Also, it may be that the novelist's art is injured by the restraints put upon him, as many a harmless honest statue at St. Peters and the Vatican is spoiled by the tin draperies in which ecclesiastical old women have swaddled the fair limbs of the marble. But in your prudery there is reason. So there is in the state censorship of the Press. The pages may contain matter injurious to *bonos mores*. Out with your scissors, censor, and clip off the prurient paragraph!" *

While we may believe with Thackeray, that people now-a-days are "of a cleaner conversation," we cannot close our eyes to the fact that, if we do not hear of and see so much moral uncleanness it is, to some extent, because it is disguised and hidden, and not because it has ceased to exist.

It is tolerated, but not recognized, or at least only recognized under certain conventional forms. Society is quite candid in this matter. One is not positively commanded not to eat of the forbiddem fruit, but the meal must be taken *en règle* and respectably. Shakespeare's poems, the tales of Boccaccio, and the wonderful adventures of Gulliver "smell to heaven," and are altogether detestable—*cela va sans dire*—but, without giving offence, you may (if you judiciously avoid particulars) discuss the merits of Alexandre Dumas and Emile Zola. Or, if it happens that you have a taste for lighter literature, what popular novels will more quickly satisfy that literary appetite than the *entrées* and dessert served up by Rhoda Broughton and "Ouida?"

Nor need you pay much attention to the abuse they have received from the discontented few, for has not Madame Grundy taken these productions under her protection? Is not "socially authorized" stamped on each title-page? What right then have men like Goodell to call them "nambypamby trash" and "printed erysipelas?"

This attitude of society towards *open* discussion of the evils that threaten to undermine the foundations of its structure, has a more practical bearing upon attempts to remedy the evils themselves than is apparent at first sight, because, while it very properly negatives gross and immodest conversation, it has always displayed an unfortunate lack of discrimination in including in the proscription agitations having for their object the eradication of the maladies.

And this absence of a becoming discernment is nowhere more marked than when the trade of the strumpet is under consideration. Here prudery might be forgiven if honest investigation were permitted. But it is not, and has not been, and we are consequently obliged to believe with Charlotte Brontè that "to such grievances as society

* Thackeray's "Virginians, chap. xli.

cannot readily cure it usually forbids utterance on pain of its scorn ; this scorn being only a sort of tinseled cloak to its deformed weakness."*

Starting out then with the premise that the endeavor to solve the problem of the social evil must not be hampered either by the opinions or prejudices of the classes for whom the work is undertaken, or by the neutrality of other classes whom we might have expected to have been ardent workers with us, it is yet pardonable to say without the slightest feeling of bitterness, and almost without a sentiment of disappointment, that there is an additional reason why the profession should not shun this particular labor of mercy, for is it not one of its daily functions to minister to the despised, the wretched and the unclean in every shape? Bearing in mind the story related by a Physician who in his day had seen "pass by on the other side" the priest and the Levite, we need not wonder that the "cry of those who have wounds without cause" should still insult their sanctified ears ; that it should still be left to less fastidious hands to pour in the wine and the oil—to less worthy brains to work out the poor enigmas of our lot! In the case of the man of Samaria we may comfort ourselves with the reflection that his charity probably did not seriously diminish *his* income, and that there was no contumely connected with *his* act of mercy!

Three queries, it appears to the writer, cover the whole ground included in the heading of this article. Side issues, important from other standpoints, force themselves on one's notice and, while it is impossible always to avoid or ignore them, because they are so intimately bound up with the causes and effects of every social disturbance, they can receive but a passing mention in the space so necessarily limited as the pages of a journal devoted to medical science. (1) Is it possible to repress *in toto* houses of ill-fame and assignation? (2) If it were possible to suppress *les maisons des dames*, would it be wise to make the attempt? (3) In the event of prohibition failing to accomplish its object, what measures are most likely to limit the evil of prostitution and to curtail the misery and disease it engenders?

It is difficult to separate the first two questions, and they may be answered together. The history of every nation that has reached a high state of civilization furnishes us with stories of endeavors made by the State to wipe out the immediate sources of prostitution, and these attempts are both interesting and instructive.

In the early history of the Greeks we find that one of their laws, incorporated in the code of Draco, imposed the death penalty on adultery. If severity could have accomplished the desired end it ought to have done so in this instance, but so powerless did it prove that Solon, seeing the futility of the measure, established by law houses of prostitution at Athens, and filled them with slaves bought by the public money. These *Dictera*, as they were called, being in a sense public servants, handed over their miserable earnings to the State, and naturally assisted in increasing its revenue. The Romans, wiser in their generation, and profiting, in all probability, by the experience of their Grecian neighbors, seem never to have attempted to wipe out the calling of the harlot. Tacitus tells us that long before his time the prostitute was obliged to register herself at the ædile's office, where she received a license—*stupri licentia*—in a similar manner and almost upon the same terms as those imposed by existing French laws regulating brothels and their inmates. It must be observed, also, that the Romans exacted in their code the penalty that modern society imposes by its unwritten law upon the unfortunate erring one ; it closed every avenue to reform. "Once a prostitute, always a prostitute," is a Roman proverb.

Passing to more modern times an instructive lesson may be learned from early attempts to suppress prostitution in France. Sanger, in his admirable work on the subject, tells us that Louis IX. made the first serious endeavor to stem the rising tide of evil in his dominions.

"His edict, which dates from 1254, directed that all prostitutes, and persons making a living indirectly out of prostitution, such as brothel-keepers and procurers, should be forthwith exiled out of the kingdom. It was partially put in force : a large number of unfortunate females were seized and imprisoned or sent across the frontier ; severe punishments were inflicted on those who returned to the city of Paris after their expulsion. A panic seized the customers of brothels, and for a few months public decency was restored. But the inevitable consequences of the arbitrary decree of the King soon began to be felt.

"Though the officers of justice had forcibly confined in establishments resembling Magdalen hospitals a large proportion of the most notorious pros-

* "Shirley."

titutes, and exiled many more, others arose to take their places. *A clandestine traffic succeeded to the former open debauchery*, and in the dark the evils of the disease were necessarily aggravated. More than that, as has usually been the case when prostitution has been violently and suddenly suppressed, the number of virtuous women became less, and corruption invaded the family circle. Tradesmen complained that since the passage of the ordinance they found it impossible to guard the virtue of their wives and daughters against the enterprises of the military and the students. At last complaints of the evil effects of the ordinance became so general and so pressing that, after a lapse of two years, it was repealed. A new royal decree re-established prostitution under rules, which, though not particularly enlightened and humane, still placed it on a sounder footing than it had occupied before the royal attention had been directed to the subject." *

Charles IX., in 1560, published an edict prohibiting the opening or keeping of any house of reception for prostitutes in Paris. Here was an instance, it is said, of the actual suppression of the traffic in a large city, but the cure was infinitely worse than the disease, for secret debauchery and seduction took the place of open sin. Society became at last so corrupt that a prominent Huguenot clergyman named Cayet, *advocated the re-opening of the brothels in the interests of public morals.* Twenty-eight years afterwards Henry III. reaffirmed the ordinance established by Charles, and in 1635 the law was made still more rigorous, but it does not appear that the illicit commerce was ever seriously diminished or the interests of morality sensibly advanced.

These French prohibitory laws have a melancholy interest for us, because a wise, paternal government at home (in answer to an urgent request for female emigrants was enabled. through their provisions, to present the colonists in Canada with wives fresh from the brothel-houses of Paris! The edge is taken off this reflection, however, when we consider that the officials who so considerately furnished the colonials with this class of helpmates were but little better off than their customers; since the adultery and seduction that followed the forced emigration affected in no slight degree the class it was expected to protect, and in many instances penetrated to the families of those who had been guilty of so vile an outrage on the virtue of the colony. So may wrong ever recoil upon the heads of its perpetrators!

In Spain the profligacy of public morals had at one time reached a height hitherto unprecedented, and this state of affairs has been ascribed almost altogether to legislation of the Draconian kind. The history of suppressive measures in Italy tells the same story. Our word *bagnio*, expressive of a house of ill-fame, originated in efforts to root out brothels and punish their inmates. When driven from their usual haunts, loose women were obliged to frequent places of public resort, so that in a short time every keeper of a *bath* became also a brothel-master.

The laws of Hamburg passed through the several phases of suppression, toleration and regulation, until now they present a fair sample of the manner in which most European cities manage their rakes and harlots.

A local writer, arguing in favor of the laws now in force there, speaks thus of repressive measures, and his assertions undoubtedly apply to all other cities: "*Suppression is absolutely impracticable*, inasmuch as the evil is an unconquerable physical requirement. It would seem as if the zeal against public brothels implied that by their extinction a limitation of sexual intercourse, except in marriage, would be effected. This is erroneous, for reliable details prove that for every hundred brothel women there would be two hundred private prostitutes, and no human power could prevent this." *

The Puritan Fathers were in the habit of dealing directly and sharply with social shortcomings. Their laws against adultery and fornication were stern and unrelenting. Their policy of repression is well depicted in Nathaniel Hawthorne's "Scarlet Letter," and the plot of the novel rests upon an instance of its failure to keep in the straight path a shepherd of the people and one of his flock.

When the mythical deputy of the Duke of Vienna issued a proclamation, dooming all suburban houses of resort, the decree is made the subject of conversation between a clown (whom Shakspeare usually puts forward as a wise man in disguise) and a noted procuress, in this wise:

Bawd.—"Why here's a change indeed in the commonwealth! what shall become of me?

Clown.—Come; fear not you: good counsellors lack no clients: though you change your place you need not change your trade; I'll be your tap-

* History of Prostitution, pp. 95, 96.

* Sanger on Prostitution, p. 197.

ster still. Courage, there will be pity taken on you: you that worn your eyes almost out in the service, you will be considered."†

And this has been the result of all attempts to eradicate an innate social evil. So long as present conditions obtain among members of human communities, just as long will they give rise to their present results. Driven from the "suburbs," the harlot will ply her trade in the city, and if, after infinite pains, she be banished altogether, we resurrect the twin demons of seduction and adultery to fill her place.

(3) In the event of prohibition failing to accomplish its object, what measures are most likely to limit the evil of prostitution, and to curtail the misery and disease it engenders?

Before attempting to furnish a direct answer to this important question it is necessary to deal with the arguments of those who condemn all regulative measures. The *laisser-faire* idea has a great many advocates, and in reference to them some terse sentences from Dr. Beardsley's article will not be out of place:—"The importation of cholera is intercepted, variola aborted, yellow fever vigilantly patrolled, pestilence of any form no longer stalks among us without being hotly chased, but a disease which lacks not a whit the type of a plague, and which, upas-like, infects nation after nation, contributing generously to their charnel-houses, nestles among us and travels on friction wheels. Hundreds are honest, ardent in their researches after some antidote to this virus, but never essay to stop or modify the evil. Prophylaxis against venereal suffering sounds to these but balderdash. To quarantine a syphilitic is passing strange. The experiment is ridiculed as if the evil was self-limited, or repudiated as contending against a dispensation from heaven, to meddle with which was to befriend a crime. The stench of this leprosy already fills our nostrils, but no mettle is sounded in our legislators to face the railings of those who hate truth, and are timid at at every revolution. To qualify a wrong is not to endorse it. The health and longevity of the race are paramount to the defence of ethics or rude platitudes in morals. If life is jeopardized, sacrifices are imperative. Individual prejudices, dogmas however dear, the faith of ages, all most unloose their hold when the perpetuation of a perfect species is called in question. If the arm of the law is powerless to stay the gratification of our passions, if the admonitions and misfortunes of others do not dissuade us from the same snare, if the whore will ply her vocation, is it criminal to disarm her of her sting? Is it not conniving at the practice to suffer that foul doxy to parade her goods and pollute a neighborhood? The time is nigh when this vapid sentimentalism in religion—this morality which dubs every dissenter from creeds an anti-Christ, and translates the license of prostitution as free love, should be undone. The social evil cannot be remedied without some compromise. It is a monster too huge to be smothered, and we must curry favor with it to lessen its depredations."*

Mr. Solly, whose reputation as a surgeon is not confined to his native country, at a meeting of the Royal Medico-Chirurgical Society some years ago, gave utterance to sentiments that, more than any other, have inspired the vehement opposition encountered by reformers in their efforts to meet this evil by legislation. Said he:—"Far from considering syphilis an evil I regard it, on the contrary, as a blessing, and believe that it was inflicted by the Almighty to act as a restraint upon the indulgence of evil passions. Could the disease be exterminated, as I hope it cannot, fornication would ride rampant through the land." It is quite within the limits of truth to say that this doctrine is responsible for the barbarous refusal to admit syphilitic patients into the public hospitals of London, not a great while ago, and prevented the erection of special hospitals for a still longer period. It is this same enunciation of the Creator's "intentions" that condemned the use of anæsthetics in midwifery, and like interpretations of God's "will" carried to their legitimate conclusions, have obstructed many a needed reform in social customs.

At one period in its history the Royal Free Hospital magnanimously devoted the whole of 26 (!) beds to diseased prostitutes, but, says the report, "the venereal wards have been for some time untenanted, owing to loss of funds occasioned by the outcry raised against this hospital in one of the medical journals." This issue is now almost a dead one, but, it might be asked, if we follow out Mr. Solly's argument, is not pneumonia a disease inflicted by the Deity upon the indulgence

† "Measure for Measure," Act 1, Scene 2.

* "Chartered Brothels," *New Orleans Med. and Surg Journal* for Sept., 1880.

in thin slippers and low-necked dresses? Are not typhoid fever and diphtheria penalties imposed by God on civic uncleanness? Are we justified then, in view of the fact that it is hardly possible to do away with their causes, in trying to cure these serious troubles? Rejecting the theory that syphilis was imported from the newly-discovered American continent by Columbus, we may suppose it first showed itself in Europe about the beginning of the fifteenth century. How, then, did the Lord punish licentious Europeans before that time? What penalty paid the worshippers at the shrine of Venus Mucheia, or of that beastly old god Priapus? If Mr. Solly's followers declare their intention of going into mourning were a drug discovered capable of ensuring illicit intercourse without the dread consequences of syphilis, surely their grief would find some solace in the knowledge that it would no longer be possible to hand that awful disease down to the third and fourth generation; that innocent children could no longer be made to suffer for the wrong of a diseased father or mother.

Another fallacy contained in this so-called argument is that the fear of acquiring venereal disease acts as a check upon the wrongful indulgence in the amatory passion. That this is a grave error the experience of most physicians will prove. The man who commits any offence against his physical or moral nature is either careless of the consequences, or he hopes to be one of the fortunate few who escape contamination.

But in discussing this matter are we not introducing into a question purely scientific an element essentially religious? What has Hygiene to do with "a monstrous outrage on religion"? How does this "rupture of moral law" affect Sanitary Science? Theological dogmas and problems in science may run in parallel lines, but any attempt to make them intersect should be cried down. Without dismissing the subject, as some writers have done, with the assertion that in any conflict between Religion and Science the former must go to the wall, it might here be mentioned that a way out of the difficulty has been indicated by no less an authority than the Anglican Bishop of Carlisle. Writing in a late review his Lordship says: "It seems to me we want a new word to express the fact that all physical science, properly so-called, is compelled by its very nature to take no account of the being of God: as soon as it does this, it trenches upon theology, and ceases to be physical science. If I might coin a word, I should say that science is *atheous* and therefore could not be *atheistic;* that is to say, its investigations and reasonings are by agreement conversant simply with observed facts and conclusions drawn from them, and in this sense it is *atheous* or without recognition of God. And because it is so, it cannot trench upon *theism* or *theology*, and cannot be *atheistic*, or in the condition of denying the existence of God."*

The melancholy fact (following the foregoing line of thought) in Sanitary Science is that a widespread and terrible contagious disease is in our midst, and the conclusion we draw from a careful investigation of its nature is that it is possible by taking certain precautions, to prevent to a very considerable degree, the extension of the malady; consequently objections born of theological dogmas or religious creeds must not be allowed to have weight in determining either the amount, kind or extent of these prophylactic measures. Sanitary science, as such, is necessarily beyond the pale of religious faith, as such.

Living in a country where the policy of *laisser-faire* holds sway, one is forcibly reminded, in reading of the occasional descents by the police upon houses of ill-repute, of the story told of an old gentleman who endeavored to ward off diphtheria from his household, by disinfecting the sewer that ran past his residence. Every morning before proceeding down town he gravely carried a piece of chlorinated lime to the street ventilator, and, holding his nose with the disengaged hand, dropped the germ-destroying morsel into the filthy waters beneath. This solemn duty performed, he felt himself and his family quite safe for the following twenty-four hours. No doubt a similar feeling animates the authorities when they make one of their periodical raids upon the inmates of brothels that are not subject to further regulation. With some slight and unimportant modifications Beardsley's description of the spasmodic repressive method in vogue within the limits of the city of New Orleans will apply to the action of the police in Montreal:—"There is no determined nor concentrated movement against brothels as against a nest of counterfeiters. Now and then a raid is made on some disorderly house after the neighbors have become exasperated, and de-

* "God and Nature," Nineteenth Century for March, 1880.

manded sternly an abatement of the nuisance. These descents are limited—four a month is about the average. In the interval the traffic flourishes and loses nothing by the interruption. As the time approaches for another sally, for they come with mathematical regularity, the proprietor with the girls, if cunning, prepares to vacate the premises only to return as soon as the official intruders have quit. If a few mopies are nabbed, one dollar and costs the next morning purchases a reprieve, and they at once steer straight for the same den to greet their comrades in arms. It is another commentary on our police system that these houses are not, after the arrest, shut up and the property confiscated. The business is tacitly recognized as contraband, else the storming of the place is not justifiable. The intent of the law seems gratified, however, if only the tenants are ousted. The building is not cleared, as it ought to be, of its appointments, and its character publicly arraigned—the owner is not fined nor imprisoned for his conniving at the business. No ordinance directs the rent to be forfeited—nor are bonds set to the landlord for the healthy use of the property thereafter. The machinery of the concern is not disabled, it is merely stopped for a few days." * The high-level purist does not believe in either digging up or pruning the social Upas tree; he would occasionally pick off, here and there, a few green leaves, or at most restrain a too flourishing branch. This policy of indifference has been tried again and again, and each time it has been found wanting. Indeed it is based on the assumption that we are powerless to deal with the social evil, and consequently it would be idle to attempt it.

Turning from those who deny the right of governments to interfere with prostitution because such interference involves its "recognition;" from those who are governed by ignorant apathy, and from those who would institute a vigorous crusade without quarter against all kinds of brothels and brothel-keepers, we are led to enquire what means, if any, are likely to restrain prostitution and limit its attendant diseases.

When we recollect that most European cities, Paris, Vienna, Madrid, Hamburg, Berlin, Brussels, etc., have instituted systems of regulating the inmates of *les maisons de dames*, and that for certain military and naval towns of Great Britain an Act was passed (The Contagious Diseases Act, 1866) with the same object, we have abundant legislation to choose from. The French laws (representing continental legislation) and the provisions of the Contagious Diseases Act may first be considered, their good and bad points referred to, and then an attempt will be made to show that, with some material modifications in the direction of allowing prostitutes greater freedom of action than is possible under the latter law, a Bill might be framed applicable to Canadian cities, or, at all personals, more consonant with Canadian ideas of liberty.

In Paris *le Bureau des Mœurs* has charge of all prostitutes within the city. This office employs a body of police which in 1870 comprised twenty-four inspectors and three superior officers. This service is altogether charged with searching for those connected with clandestine prostitution (*prostituées insoumises*). There is a sanitary department attached to the *bureau* which superintends the health of the women, and for this purpose employs ten superior and ten assistant surgeons, who examine all prostitutes subject to police surveillance. All women found diseased are at once sent to the St. Lazare Hospital, where they are detained until cured. They are then allowed to resume their occupation, subject to certain regulations. All courtesans over sixteen years of age are registered at the *Bureau des Mœurs*, and are divided into two classes; 1st. *filles des maisons*, who live in houses of ill-fame and are subject to weekly examination at their residences: 2nd, *filles a carte* or *isolées*, who occupy furnished houses by themselves, and are obliged to present themselves at the Dispensary for medical inspection every fifteen days. Each of the latter class carries a *carte* or "bill of health," dated and signed by the surgeon who examines her. On the back of the *carte* are printed certain regulations to which she is ordered to conform. These orders refer to her conduct in public, forbidding her to ply her trade in daytime or after 11 p.m. She must be simply dressed, walk quietly along, and she cannot approach within a radius of 25 yards any church, chapel, the Palais Royal, Jardin des Plantes, etc. It is needless to say that clandestine strumpets resort to all sorts of artifices to elude the police, and the registered prostitutes evade, by all means in their power, the regulations intended to control their conduct.

M. Parent-Duchatelet, speaking of the severity

* *New Orleans Med. and Surg. Journal* vol. viii, pp. 203, 204.

of the French laws against "those who abuse a girl not yet arrived at the age of discretion, and the severe punishment inflicted on those who promote this premature debauchery," shows how this severity makes it difficult to bring home the crimes to their perpetrators on account of the secresy employed, and hence he says "these young persons are the greatest destroyers of public morals and health.* That is to say, the law does not recognize prostitutes under sixteen, so they are all the more sought after.

It will at once be seen that French laws are too tyrannical, too costly and too elaborate to introduce into Canada. Here, as long as she behaves herself decently, a prostitute has as good a right to walk during daylight on the public streets, to go to church, to attend the theatre, and dine at hotels as any other woman, and nothing would justify her forcible removal from any of these places on mere *suspicion* of her being there for the purpose of plying her trade. Again to hunt up clandestine women involves an arbitrary search of private houses which public opinion would not tolerate. That there is something radically wrong in the system is proved by the acknowledged fact that out of the 30,000 loose women in Paris in 1870 only 4,000 were registered and subject to sanitary inspection, and this in spite of a strict application of the almost despotic powers possessed by the police. Notwithstanding this, hygienic measures have wonderfully reduced syphilis among the registered prostitutes, as may be seen by the following table,* in which is given the proportion of diseased to healthy women among both the registered class and the clandestines captured by the police.

Year.	Registered Prostitutes in brothels inside of the walls.	Ditto in the suburbs.	Ditto in private lodging	Unregistered prostitutes.
1845	1 in 142	1 in 59	1 in 261	1 in 6.40
1846	1 in 152	1 in 53	1 in 183	1 in 6.37
1847	1 in 154	1 in 52	1 in 351	1 in 6.46
1848	1 in 126	1 in 37	1 in 182	1 in 5.66
1849	1 in 128	1 in 44	1 in 201	1 in 5.76
1850	1 in 148	1 in 47	1 in 142	1 in 5.31
1851	1 in 199	1 in 60	1 in 180	1 in 5.47
1852	1 in 184	1 in 76	1 in 349	1 in 5.64
1853	1 in 183	1 in 123	1 in 402	1 in 5.12
1854	1 in 176	1 in 102	1 in 377	1 in 4.26

* De la prostitution dans la ville de Paris, 1857.

* American edition of Westminster Review, vol. xciii. 77.

A similar proportionate reduction has likewise been effected in other continental cities, but, as will be seen by the above table, the dislike of forced inprisonment in St. Lazare has had the effect of making unregistered harlots hide their diseases more than ever, bringing about a frightful condition of things among that class. The proportion of syphilitic to healthy women increased from 1 in 6.40 in 1845 to 1 in 4.26 in 1854 and in 1866 it had risen to one in every four.

The Contagious Diseases Act in some points resembles the French laws. Of course it was limited to certain naval and military stations with their suburbs.

One feature of these enactments provides that all prostitutes shall be registered and regularly inspected, and that when information is made on oath that a woman is a common prostitute a justice may issue a notice to such woman, through the superintendent of police, to appear for surgical examination. Certified Lock hospitals are provided for her if she is discovered to be ill. It proposes a heavy penalty on any brothel-keeper who harbors a prostitute knowing her to be diseased. Health tickets are issued to prostitutes; they are punished for evasion of the inspection, and the hospitals are supported by fines and taxes on the business. These provisions, after much opposition were passed by Parliament, and many were in favor of extending them to the civil population.

Mr. Wm. Acton, in his exhaustive work,* writes that he considers it very desirable that the Diseases Act should be made general, and a very high authority, Dr. Parkes, says, "The Act at these large stations has done great good; but, as framed and administered, it is far too feebly drawn, and too partially carried out, to cope entirely with the evil. The prostitutes are not thoroughly under inspection; many are not inspected at all; neighboring towns send in prostitutes; hospital accommodation is insufficient;—it is clear that the evil is too great to be dealt with piecemeal; it is inevitable but that the Act must eventually be made compulsory over the whole country, and the entire system of prostitution dealt with carefully and completely once for all." †

The agitation for repeal of the Contagious Dis-

† Manual of Practical Hygiene, page 503.

* Prostitution considered in its Moral, Social and Sanitary Aspects. Third Edition.

cases Act has brought out all sorts of objections to it, some of which appear quite valid and still more of them absurd. Dr. Birkbeck Nevins, of Liverpool, has written one of the few pamphlets against the Act that are worth perusal.‡ Besides the evidence collected by Dr. Nevins and others, the editor of the *Westminster Review* has bravely laid aside those feeling of false delicacy which had hitherto prevented the Press from arousing and instructing the people concerning the extent and malign influence of the social evil; and in a number of articles and reviews furnishes his readers with unanswerable arguments against the extension of the Act of 1866, and its amendments in 1869.

Without attempting to particularize the evidence furnished by these writers the chief points may be briefly indicated as follows: (1) Such acts legislate for man, but treat woman as if she were only an instrument to satisfy his evil passions, and they subject her to a moral degradation below that of ordinary prostitutes not subject to the enactments. (2) The law compels women to commit themselves absolutely to a life of infamy, whereas before they had it in their power to turn back and reform. There is always a class (in some places a large class) of females who are driven to adopt prostitution temporarily as a means of gaining a livelihood or to support others dependent upon them. These unfortunates, if they wisely keep their own counsel, may resume their ordinary position in society; but never if they are forced to register themselves and become public prostitutes. (3) The enforced examination by a public officer wipes out any sense of modesty or delicacy they may have retained, and confirms them in a life of prostitution. (4) The whole system places serious obstacles in the way of attempts to reform the erring ones. When in hospital they naturally regard any advice or instruction as a part of the compulsory programme. They are bound to listen to it, and for that reason derive little benefit from it. (6) It is impossible to carry out the provisions of the acts in large cities, when conveniences for clandestine prostitution are so many and so varied. (7) It is asserted that "in towns where registration and forced examination are introduced the effect upon the morals of the rising generation is exceedingly injurious." *

‡ Statements of the Grounds upon which the Contagious Diseases Acts are Opposed, 1875.

* Report of Royal Commission on Contagious Diseases Act.

How to avoid the evil effects of governmental regulation, and yet do something towards lessening the diseases arising from the social evil, is the question that must not be considered.

To begin with, the seduction by a man come to years of discretion of a girl under sixteen years of age with or without her consent, should be made a crime and severely punished. There may be some excuse urged for the satisfaction of the sexual passion when the female is of age and already a prostitute—it may be that "prostitution in man is an irregular indulgence in a natural impulse," as the Royal Commissioners have put it, but to take advantage of the ignorance and inexperience of a mere child is inexcusable, and the offender should be rigorously dealt with. Such a law would strike at the root of one of the most fruitful sources of subsequent prostitution.

Then "Homes" for the reception of women reclaimable by such an agency ought to be provided, and above all, *voluntary lock hospitals should be established*, where diseased females could be properly treated and cared for, and women should be encouraged to enter them without being *forced* to do so.

The absence of opportunities for adequate treatment has always been one of the reasons why unclean prostitutes persist in their career after becoming diseased. In hospitals of this kind the patient should be surrounded by all the moral, intellectual and sanitary influences that would tend to elevate her from her degraded position, and perhaps induce her to abandon her evil courses.

The wards should be graded, so as not to confine in the same room the hardened prostitute with the girl who is new in crime and comparatively redeemable. For other reasons this gradation is necessary. To quote Parent-Duchatelet [*op. cit.*]: "It is difficult to convey an idea of the contempt which, according to the class to which she belongs, each woman manifests for those of the other classes. Those woman who associate with men of wealth or of high position look only with disdain upon women as are only sought after by men of merely ordinary fortune. Woman of this class, again, contemn, in like manner, the unhappy creature who only appears in the rags of the most disgusting misery. This distinction which prostitutes establish among themselves is avowed by all, and is specially remarkable when circumstances cause them to meet each other at the same place; they

avoid each other; they do not sit down on the same seat; they form isolated groups, and do not mix together in conversation. It may be said generally that these classes do not intermingle; that is to say, the girls do not pass imperceptibly from one class to another, and successively from the highest to the lowest; they remain till the end in that class in which they began their career, or out of which they have been unable to go; and thus it is that very beautiful girls may be seen to begin and end their life of prostitution in the most infamous places. Each of these localities being frequented by a particular class of men, the woman there acquire a tone, habits and manners, the result of which is that the girl destined for the artisan, the laborer and the mason finds herself misplaced with the officer, and is devoid of the necessary attractions for the latter. The same is true with respect to the woman who has contracted the habit of living with the educated and elevated classes of society: she shrinks from associating with coarse, vulgar people, who themselves are unable to appreciate the qualities which distinguish her. This rule may be considered general. A girl who makes her *début* in one class would believe herself to be losing caste in leaving the class she occupies for one immediately below it. This is partly the reason why so many girls withdraw themselves from prostitution a short time after they have entered upon it."

As these hospitals are essentially charitable institutions there is no reason why the inmates should not pay a weekly sum proportionate to the kind of accommodation received and the patient's ability to pay. It is extremely important that the nurses and medical officers should be especially respectful, kind and gentle. On this point the philosophic Duchatelet is very decided. "Experience," he says, "has proved the utility, indeed the necessity, that the medical officers should observe great gentleness, both in their speech and procedure; prostitutes overwhelmed with humiliation, treated with the utmost disdain, and feeling acutely their abjection, know how to appreciate a method of treatment less rude, and feel grateful for the kindly feeling it indicates. * * * * * * This gentleness, far removed from familiarity, and which is not incompatible with the reserve, gravity, and dignity which indeed it is necessary to emphasize under the circumstances, enables the physicians to command the respect and deference which are due to them, and which the women are eager to render."

Such a hospital should be overlooked by a matron of tried skill, and she should have under her nurses upon whom the greatest reliance could be placed. These officials should have full charge of the sanitary and moral regulations of the institution.

The medical staff should have charge of the medical department; and should advise with a committee of management when required. From these remarks it will be seen that we contend for a hospital supported principally by public charity and certain fees (the source of which will be hereafter referred to), because anything like governmental regulations of the internal economy of such an institution should be avoided, if possible.

The charitable contributions of the community to aid in the support of these hospitals will be all the more readily forthcoming when it is understood that the cure of disease and the alleviation of suffering are their main objects, and not the rendering of fallen women fit to co-habit with male prostitutes. Carried out in a proper spirit, such refuges for diseased females would effect a vast amount of good.

The work of social and moral regeneration might be carried on with an effect impossible in lock hospitals under the regulations that obtain under the Contagious Diseases Act. Dr. Nevins gives the following significant extract from the Metropolitan Police Report of 1874:—"Women come from unprotected districts, and insist on signing the voluntary submission form, in order that their names may be placed on the register, and that by this means they may gain admission into hospital." * How much more readily would diseased unfortunates seek a shelter where they would meet with sympathy, where they would not be looked upon with disdain, and where they would be assisted to recover their lost place in society, than if they had to incur the degradation and penal consequences of registration.

But there is another side to the story, which justice and the public health demand should receive attention. A diseased prostitute, whatever else she may be, is a local centre of contagion and a dangerous member of society; and means should be taken to prevent her from spreading the disorder from which she suffers should she persist in doing so. When a woman has a venereal disease, and in that condition knowingly gives it to others, it behooves the authorities to step in and, if possible,

* Capt. Haris's Report, see sect. 10, par. 7.

prevent the infection. The same arguments that justify removal to civic hospitals of cases of small pox and cholera apply to syphilis and gonorrhoea.

In the interests of the public health such cases should be isolated. It has been suggested that physicians should have power to communicate to the chief of police the names of those prostitutes from whom any of their patients has contracted disease. The medical man should satisfy himself that the patient is in a position to state positively when, where, and from whom, he caught the contagion, and that the female is in the habit of distributing her favors promiscuously or for money. Where there is any doubt about the last two points the suspected woman should have the benefit of it, but in the majority of instances the police would be able to settle the question satisfactorily. Having satisfied himself on these points the Chief should have power to serve a notice on the woman to forward to him, within 24 hours, a certificate from a regular practitioner of her being in a healthy state, or else, if she be a common prostitute to present herself at the hospital for treatment. In the case of those who are not "common" in the ordinary acceptation of the term, *i.e.*, who do not practice their trade openly, and do not live in brothels, it would be justifiable to accept a certificate from a regular practitioner that the woman is under treatment by him, and that he would use every means in his power to prevent her from co-habiting until she recovered. In this way (for all these proceedings would be kept secret, and neither the name of the male sufferer nor of the female patient would be divulged) scandal would be prevented in the case of occasional and otherwise "respectable" females.

For the other class, those who are generally recognised strumpets, neglect or refusal to furnish a proper certificate, or to undergo treatment of disease, would justify their arrest and forcible detention in special wards of the hospital for a time discretionary with the officials in charge. Action of this kind would encourage the voluntary system and leave coercion as a *dernier ressort*. It would incite women to apply for treatment at once, and not wait until they were compelled to quarantine themselves by the strong arm of the law. It would respect the respectable, but punish the guilty. Voluntary patients might be allowed to leave the hospital when they desired, but they should be warned that any attempt to return to their trade until fully cured would involve their semi-imprisonment in the "coercion" wards of the hospital, and cut them off from all the privileges of the voluntary side. Examinations should be made voluntary in a Dispensary attached to the hospital, and a small fee (in Hamburgh, where the regulation system is in vogue, it is only a mark) should be charged. As soon as the intention of periodical examinations was known they would begin to be appreciated and, in time, the great majority of the prostitutes in the city would be likely to present themselves for medical inspection. A larger fee might be charged for attending the prostitutes at their houses. Certificates of good health might be issued if asked for by the women, but it must be understood that they are not considered necessary. It would, of course, be out of the question to admit students to any part of the hospital except to the coercion wards. This portion of the institution, being in some sense a city house of correction, would have a good claim for civic support, and in that case might be overlooked by a local inspector. In the event of a hardened sinner persisting in spreading venereal diseases instead of applying to hospital for relief, and necessitating repeated arrests, it would be justifiable to have her registered and examined by the medical officer not less frequently than once a week. This would be a greater punishment to her, in view of the treatment of her other sisters in vice, than imprisonment.

To complete these suggested regulations it ought to be made possible for an inmate of a house of ill-fame to abandon her life of infamy free of any claim for board, liquors, clothes, etc., the brothel-keeper may have upon her. It is, of course, to the interest of procurers and keepers to exert as great an influence upon their stock-in-trade as possible, and for this purpose many of them try to keep the girls in debt, so that they are compelled to continue in their old ways. It would be a good idea, also, to subject brothel-keepers to a heavy fine, if it be proved that they allow any of their women to remain in their houses after becoming diseased. The proceeds of such fines would go to defray the expenses of the hospital. The advantages of the measures above specified recommend themselves, because: (1) the legislation involved is not a one-sided treatment of woman as if she were made for man simply to gratify his lust upon; (2) they leave a way open to those erring ones who desire to reform;

(3) women are not compelled, except as a last resort, to undergo a degrading periodical examination by public officers; (4) the system does not condemn to a life of hopeless infamy those who err temporarily, or who are seduced by designing men; (5) they provide for clandestine prostitution; (6) they are voluntary to a very great degree, and attempt to do by kindness what coercion has, over and over again, failed to accomplish; and, lastly, (7) they do not violate the sanctity of private houses, as the system of forced registration is sure to do.

An enumeration of the benefits to be derived from Magdalen hospitals would not be complete without a reference to that noble band of religious women belonging to the order of *les Sœurs de la Compassion* who have charged of *l'hôpital de Lourcine* in Paris. These devoted woman have caught the true significance of Christ's teaching when He stepped in between the woman taken in adultery and her accusers, the stern Scribes and Pharisees, and rebuked them for their self-righteousness:—

"Woman where are those thine accusers? Hath no man condemned thee? She said, No man, Lord. And Jesus said unto her, Neither do I condemn thee: go, and sin no more."* And these considerations bring us back to the old question, When shall we see prostitution itself abolished? and while the discouraging and too ready reply is, not while society exists in its present state, one is inclined to believe that a great deal of the difficulty arises from the unjust and despicable manner in which society treats women who lose their virtue from any cause. A man sins, and social custom either excuses or forgives the transgression. A woman goes astray, and every avenue of hope is at once closed against her. The escapades of the rake bear such social interpretations as "sowing his wild oats," "young men will be young men," and so on; but upon the temple of the harlot's shame, as over the portals of Dante's *Inferno* is carved the dead anaglyph:—"All ye abandon hope who enter here." If society expects to abolish prostitution it must first insist upon meting out the same measure of condemnation to both sexes for offences committed by either,

October 20, 1885

*John viii. 10, 11.

Progress of Science.

ON TYPHOID FEVER, ESPECIALLY WITH REFERENCE TO PROGNOSIS.

Delivered at the Hospital of the University of Pennsylvania.

By William Pepper, M.D., LL.D.,
Provost of, and Professor of the Theory and Practice of Medicine in the University of Pennsylvania.

Gentlemen,—The patient before you to-day was admitted to the hospital seven days ago. We could obtain no definite history, but, as far as could be learned, the man had been sick for two weeks before admission, with delirium, continuous fever, hemorrhage from the bowels, and, for a day or two before he came in, with cough and rapid respirations. From this account it is probable that he was admitted at the beginning of the third week of an attack of typhoid fever complicated with pneumonia. The course of the case during the past week is indicated by the following notes:

January 3 (day of admission). There were no evidences of blood in the discharges from the bowel. The face was flushed, the tongue was dry and coated, and there were sordes on the teeth.

Jan. 4. Had some delirium; belly moderately distended; several spots of typhoid-fever eruption were detected. There were several liquid stools, dark yellow in color. Shortly after admission the temperature was 103.4°. After this the temperature fell and continued to diminish until two days ago.

January 6. More delirious, plucking at the bedclothes. Temperature not so high. Dulness over the right lower lobe of the lung posteriorly, and over the dull region the characteristic crepitant râles are heard. There is retention of urine, it being necessary to use the catheter. Temperature between 101° and 102°.

January 7. Still further fall of temperature. The dulness over the posterior portion of the chest is extending upward, having now reached the third rib. The restlessness, delirium, and plucking at the bedclothing have continued.

These symptoms continued through the 8th, but during the night of the 8th the temperature began to rise, and yesterday morning (the 9th) it stood at 101°. Last night it was 102.5,° and it is the same this morning, so that there has evidently been a renewal of the fever.

The treatment has been one of active stimulation. He has taken as much milk as we could get him to use, giving it in comparatively small quantities, repeated every hour or hour and a half with a small quantity of whiskey, so that he has averaged one ounce of whiskey every two hours since admission. In addition he has taken turpentine. I would mention that, since admission, the bowels have been open only once each day, with the exception of one day during which there were four stools, and again, three days ago, when twenty-

four hours passed without any stool. He has borne the turpentine mixture very well. For the excessive restlessness which he has presented he was last night given nine grains of musk.

We find our patient, then, this morning, at the beginning of the fourth week of the attack, delirious, with from time to time rolling of the head, with very little intelligence, with the mouth partly open and the teeth and lips coated with dry sordes. These sordes are nothing but the foul secretions of the mouth dried by the passage of the air over them. When a patient with typhoid fever has no obstruction of the nostrils, and retains sufficient intelligence to breathe through them, and keeps this up during sleep, sordes do not form so much ; but when the patient sinks into a typhoid state, with dulness of mind, breathing is carried on through the mouth, and the secretions are rapidly dried and form crusts. This is largely owing to the fact that, as a result of the high temperature and the perverted state of the secretions, all the buccal secretions are thick and viscid, and readily dry, with the formation of crusts.

When told to protrude the tongue, he does so better than he did a few days ago. It is coated with a grayish-brown fur. As I have already stated, the temperature this morning is 102.5°. The pulse is very small, compressible, and 140 per minute. The temperature is well kept up ; the hands and feet are warm. For the last day or two the distention of the abdomen has been very great, and in order to remove this tympanitic condition, turpentine stupes have been used every couple of hours during the night, and this morning the distention is somewhat reduced.

I shall not disturb him to demonstrate the sign of pneumonia. The dulness, however, does not extend anteriorly, and over the front of both lungs auscultation reveals the presence of vesicular murmur mixed with coarse râles, chiefly bronchial, showing that there is considerable bronchial irritation of both lungs, with consolidation of the posterior portion of the right lung.

This case illustrates the difficulties attending the treatment of typhoid fever in hospital practice. This man, having received no medical care, no proper nursing, and improperly fed, was admitted to the hospital at the end of the second week, by which time his vital powers had been exhausted and his digestion totally broken down, with diarrhœa of from four to six loose stools daily, which had been allowed to continue ; and, worse than all, with a pneumonia which very likely developed on account of his want of treatment. The late period at which he comes under treatment, the gravity of the nervous and abdominal symptoms, and the grave complication of pneumonia which he presents, make the prognosis unfavorable, and I expect this man to die. At the same time, the decrease in temperature which has taken place during the past four or five days until night before last, the subsidence of the diarrhœa, and the absence of vomiting, are favorable symptoms, and hold out a hope of his pulling through. The great danger is that the weakness of the heart, which has resulted from want of proper care and proper sustenance, is such that it will be unable to stand the strain, and that we shall have symptoms of heart failure, increasing pulmonary engorgement, disturbed capillary circulation, deepening stupor, and death. Forty-eight hours will settle the question.

The complications of typhoid fever may be divided into the nervous, the abdominal, and the pulmonary. It is curious how different cases will present these complications in different degrees of severity. Scarcely ever will they be found equally well marked. As a rule, when the nervous symptoms are marked the abdominal are not. The combination of marked nervous and pulmonary symptoms is more common. In some of the worst cases of the abdominal complications of typhoid fever, such as copious and intractable diarrhœa, hemorrhage, and great distention of the abdomen, the brain is perfectly clear. In the present case the abdominal symptoms seem to have been marked in the early stage. The man had more or less diarrhœa ; but this may have been due to want of proper care, for as soon as he came under proper treatment the diarrhœa ceased, and now he has but one stool a day. We estimate the gravity of an attack of typhoid fever, in the first place, by the range of temperature. If the temperature is not above 104° it is not an unfavorable sign. If it reaches 105° but does not remain at that point, it is not serious. Anything above 105° we term hyperpyrexia, and this is a dangerous sign, particularly if the temperature remain almost continuously, day and night, above 105°. When, however, as in the present case, the temperature ranges between 101° and 104°, and does not exceed this latter point, it does not become a source of much added danger. In children and in sensitive women a temperature of 105° is often reached and maintained for some time without serious danger. It is important to recognise this fact, for it will save the necessity of resorting to powerful measures to reduce the temperature. Far too much importance—or, rather, far too exclusive importance—is now a days attached to the study of the temperature in febrile diseases. It is important, and should be carefully watched, for it aids both in prognosis and in treatment ; but the case with which thermometric observations are made, their accuracy as contrasted with the manner in which many other symptoms have to be studied, and the certainty which they seem to give in studying the course of the case, are apt to divert our attention to too high a degree from the study of the pulse, the nervous system, and the digestive organs ; whereas, as a matter of fact, the temperature in many cases is less important than information drawn from the other points to which I have referred. Particularly I am sure that we allow our treatment to be governed too exclusively by this question of temperature, and are too prone to resort to powerful antipyretics, which sometimes are depressing, irritating, and disturbing. Many cases

of typhoid fever do perfectly well without severe antipyretic treatment, even though the temperature be high. It is only when the nervous symptoms and the condition of the heart indicate that the high temperature, in the absence of other complications which would account for the symptoms, is acting as a disturbing element on the brain and the heart that it calls for active treatment. Then we should resort to any plan of antipyretic treatment which is efficient, as large doses of quinine or the external use of water. So long as the high temperature is maintained without manifest injury being inflicted on the brain or the heart, it is better to avoid powerful antipyretic measures and to allow the case to run its normal course. This is particularly applicable where there are complications which are of themselves sufficient to maintain the high temperature and account for a certain amount of nervous irritation. Under such circumstances these powerful remedies often do more harm than good.

Among the indications to be considered in the prognosis I have mentioned the heart and the pulse This is exceedingly important. I think that the study of the sounds of the heart—of the strength of the muscular or first sounds of the heart, the strength of the impulse, the way in which the artery fills at the wrist, how it resists pressure, the quality of the beat, the frequency of it, and its regularity—is of the first importance in the prognosis of typhoid fever and as a guide to treatment, particularly in regard to the important question of the administration of stimulants. You have a patient with a dry, brown tongue and marked nervous symptoms. It may be difficult to decide whether he needs remedies of a sedative character, and perhaps counter-irritation, to quiet the nervous restlessness and draw the excitability from the nerve-centres, or whether he requires stimulation to raise the tone of the circulation and cause a healthier tone of action in the nerve-centres, and thus bring about a secondary quieting or sedative effect. The best test of this is the action of the pulse and the influence of stimulants on the pulse. In a case where the pulse is from 120 to 140 per minute, very compressible, so that it collapses under the slightest pressure, with an exceedingly weak first sound, so that it assumes almost a valvular character, stimulants may be given freely; and, under their use, as a rule, the temperature will fall, dryness of the mouth will lessen, and the nervous symptoms will improve. These results indicate that the stimulants are doing good, and encourage us to continue or to increase them.

This man needs free stimulation, and if he can stand one ounce of whiskey every hour we will not hesitate to give it to him through the next two or three days, to tide him over this crisis, for unless the heart is kept up I fear that he will die in the way which I have mentioned.

Symptoms referable to the abdominal organs afford some help in prognosis, but they are not as reliable as the evidence presented by the temperature and the circulation. The amount of diarrhœa which the man has had has not been very serious, but yet I think that diarrhœa in typhoid fever is not a good thing. I do not regard it as an evidence of the efforts of nature to eliminate the poison from the system. On the contrary, it is to me an evidence of active disease in the intestinal canal, of imperfect digestion of the food taken, of the presence in the intestines of putrid, irritating secretions. It is undoubtedly better that such irritating secretions should be discharged than that they should be locked up in the bowel to undergo putrefaction and probably furnish fresh poison to be absorbed. If, however, by regulated diet, by the avoidance of irritating remedies from the earliest moment that typhoid fever is suspected, and by the use of remedies suitable for the disease of the glands which is certainly going to develop, we can render the matters which enter the intestine so easily digestible and assimilable that they will not putrefy, we may keep the secretions in a less putrid state, and thus diminish the diarrhœa. I think that the early treatment of a case of typhoid fever has more to do with the state of the bowel than anything else. It frequently happens that when a patient presents himself to a physician in the early stage of typhoid fever he is given a laxative, with the idea that he is suffering from a slight catarrhal attack from irritating matter. As you know, one of the diagnostic signs in the early stage of typhoid fever is the remarkable effect from a laxative. It will produce several loose stools; and when the physician sees this his attention is directed to the possibility of the case being one of typhoid fever. But I do not know that much is gained by this therapeutic test. Suppose the case were only one of catarrh of the intestine, allowing the bowels to remain quiet would prolong the case only twelve or twenty-four hours, the irritating matters would be discharged, and the patient would have taken nothing to increase the trouble; but if the case is going to be one of typhoid fever, the patient has on the brink of ulceration a number of glands throughout the intestinal canal, and then I think that even the mildest laxative is undesirable and may be directly harmful. I have no doubt that many cases of typhoid fever have this intestinal element, and are made serious by injudicious management during the first forty-eight hours. What is wanted is absolute rest, absolute diet, and absolute avoidance of direct medication until the disease indicates what it probably is going to be. When diarrhœa is present, it is to be checked, not by the use of opiates to lock up the bowel, but by reducing the food taken until we obtain that which can be absorbed. The ordinary principles of alimentation are as true in typhoid fever as they are in health. It is not that which is put in the stomach that does good, but it is that which the stomach is able to absorb and appropriate and put in such a condition that when it enters the intestinal canal it shall be readily absorbed. It is useless to pour three ounces

of milk one hour and three ounces of beef-tea the next hour into a patient who is not really absorbing more than half an ounce in the twenty-four hours. The more food is given under these circumstances, the more is digestion deranged. Fermentation takes place, and the abdomen is greatly distended from the accumulation of gas. I should try to check the diarrhœa by reducing the diet to a point where the patient is able to assimilate it, by the use of remedies directed to heal the irritated mucous membrane, and by the use of opiates only in small quantities. Opiates to check the diarrhœa of typhoid fever usually do as much if not more harm than good. A continuance of diarrhœa is often well borne, particularly if the stools come from the lower bowel as a result of the discharge from the ulcers, and do not come from want of absorption of the nourishment which is taken. If they are not associated with great tympanitic distention of the belly, or with marked failure of the pulse, or with severe nervous symptoms, a certain number of loose stools may be borne without particular harm. When, however, there is continued diarrhœa, with frequent copious stools, particularly if discharged unconsciously, with distention of the abdomen, showing that the intestinal muscles and the muscles of the abdominal walls are paralyzed, the prognosis is extremely bad, for such diarrhœa is apt to prove uncontrollable.

Another symptom referable to the abdominal condition of the intestines is hemorrhage. Hemorrhage from the bowel often occurs as a hemorrhoidal discharge and means nothing serious. Slight hemorrhages occurring early are not of evil omen, and hemorrhages occurring at the time that the sloughs are cast off may not be serious; but where the bleeding is frequently repeated and the amount lost is large, and where it is associated with diarrhœa and great tympanitic distention of the abdomen, it indicates such prostration of vitality and such dyscrasia of the blood as to render the prognosis very unfavorable.

The tympanites ,which this man has had amounted to a serious trouble; and sometimes the tympanitic distention goes so far as to constitute an important element in the prognosis. It indicates, in the first place, a paralytic state of the muscles of the abdominal walls; and in the second place it indicates fermentation of the ingesta and deficient digestion and absorption. This distention, by its pressure upward, causes marked interference with respiration and adds greatly to the effects of any pulmonary trouble which may coexist. Distention of the abdomen in typhoid fever should be studied in this way so as to be traced to its proper cause. If it is the result of muscular debility, it will be helped by stimulating applications. Strychnia is particularly useful in these cases. If it is the result of fermentation of the ingesta, it may often be diminished by peptonizing the food and by the internal use of carbolic acid and creasote, which will lessen fermentation. Where the accumulation of gases interferes with the action of the diaphragm, an attempt should be made to draw off the gases by a rectal tube. This operation usually has to be repeated, and I have even been forced to puncture the abdominal wall with a hypodermic needle to draw the gases from the intestine; and I have seen patients recover where I have had to do this on several successive days on account of interference with respiration. As a rule, however, when it comes to this point death follows.

I shall add to the large amount of alcohol which this man is taking one-fortieth of a grain of strychnia four times a day. This will be dissolved in weak alcohol and water and thrown under the skin of the abdomen.

The pulmonary symptoms of typhoid fever afford very important elements in prognosis. We should never let a day pass without examining the lungs and heart of our typhoid-fever patients. A certain amount of bronchial irritation is an almost constant element in typhoid fever. Usually by the end of the second or during the third week we find hypostatic congestion, with a little impairment of resonance, weak vesicular murmur, and crepitant râles on inspiration over the lower lobes behind. This we consider an almost inevitable feature of the disease; but when, instead of merely a hypostatic congestion, the disease, as here, goes on to consolidation, and, as you observe, is unilateral, not symmetrical as is hypostatic congestion,—not limited to the lower lobes, but involving first the lower lobe and then extending to the upper lobe, with bronchial respiration and with coarse, crackling rales.—we know that it is not merely an exaggerated degree of that congestion incident to the disease, but that it is a real complication, a croupous pneumonia.

As I have said on another occasion, the typhoid state and pneumonia present different relations to each other. Pneumonia may be present and run into the typhoid state. This really is typhoid pneumonia. Again, there may be typhoid fever and pneumonia occurring as a complication; but this has nothing to do with typhoid pneumonia. It is typhoid fever. The pneumonia is a purely intercurrent, accidental phenomenon, a true complication,—and it is a complication of great gravity. Sometimes it takes the form of catarrhal pneumonia; and this is even worse than croupous pneumonia. It is apt to be associated with extensive collapse of the lung. The areas affected multiply and spread, and exudation and softening occur: so that, on the whole, catarrhal pneumonia complicating typhoid fever is even more unfavorable than croupous pneumonia, except the extent of the latter be very great; but either of them is a grave complication and adds largely to the mortality. If it comes upon a patient with bad typhoid fever, already reduced by other symptoms, as diarrhœa, and who presents evidences of nervous exhaustion and failure of cardiac power, the chances are that the patient will die. The prog-

nosis is rendered graver by the existence of the serious pulmonary complication, and this is an indication for vigorous stimulation. The amount of alcohol should be increased, as much concentrated nourishment as the digestive organs will stand should be given, and carbonate of ammonia and turpentine administered internally. In this case turpentine in the dose of ten drops in emulsion every three hours has been given for the tympanitic distention of the abdomen, and has been found to act satisfactorily. It will therefore be continued.

Lastly, this case is instructive in regard to the nervous symptoms, which are always valuable in prognosis and treatment. We expect a certain amount of nervous disturbance in these cases, and rarely is it wanting. Occasionally it is absent, and this year particularly I have seen an unusually large number of cases of typhoid fever which were characteristic in other respects, but presented no nervous symptoms whatever. Another curious fact is that in many cases during the past year the abdominal symptoms were wanting, and many cases presented constipation, so that it was necessary to use an enema every third or fourth day. In some cases I gave once a week a grain of calomel in one-tenth of a grain doses, followed by an enema. As a rule, however, we expect some nervous disturbance. As long as it is only a little night delirium it is not an evidence of much danger. This is, of course, more marked in those of a nervous temperament. When it deepens into marked hebetude with tendency to stupor, or, still more, when it takes the form of constant, restless delirium, with quick suspicious glances of the eye alternating with dulness, with constant twitching even when the patient seems to be asleep, with plucking at the bedclothes, it is a symptom of gravity. Other grave nervous symptoms are struggling constantly to rise and slipping down in the bed as from muscular debility. I need not say that profound stupor and convulsions are very serious symptoms. This man has presented twitching of the tendons, picking at the bedclothes, and almost constant delirium in a marked degree ever since he had been under observation. As a rule, the nervous symptoms of typhoid fever are evidences of debility and call for a stimulating plan of treatment. When in the early stage of the disease they are present, with marked arterial excitement, flushing of the face and injection of the eye, they are indications for counter-irritation and a sedative plan of treatment. In the present case the nervous symptoms have been such as to call for stimulation, and as he has been stimulated the nervous symptoms have diminished. Here, then, is an important guide for treatment. If, under the use of stimulants, the nervous symptoms diminish and sleep becomes more natural, we know that the stimulants are doing good.

This patient is bearing stimulation very well. The only question is whether or not we can stimulate him enough to tide him over the next twenty-four hours. He will be given eighteen to twenty-four ounces of whiskey in the twenty-four hours, ten drops of turpentine every three hours, and one-fortieth of a grain of strychnia hypodermically four times a day, and if he is restless at night the musk shall be repeated.

[This case was again presented to the class two weeks later. An abscess of the parotid had formed and opened, but the patient was greatly improved, and had been free from fever for several days. At this time the quantity of stimulus, which had been reduced, was still further reduced, so that he received half an ounce every two hours. He was also ordered a mixture containing one-fortieth of a grain of strychnia, two grains of quinia, five drops of dilute hydrochloric acid, ten minims of compound tincture of cardamom, and sufficient water to make one drachm. This was to be taken four times a day, and constituted the only treatment. The patient made a rapid recovery. REP.]

DISORDERS OF DIGESTION.

From the *London Med. Times*, February 7, 1885, we note the following extract from Dr. T. Lauder Brunton's lecture:

In the first lecture, the lecturer had stated that the function of digestion, like health generally, might be strong or weak. A strong digestion was capable of withstanding all sorts of adverse influences, while a weak digestion remained undisturbed only under the most favorable circumstances. When any disturbances occurred in the digestive function, no matter whether it were strong or weak originally, the first step towards restoring it to health was to remove, if possible, any disturbing causes which might still be acting upon it. One of the commonest of these was imperfect mastication. This frequently arose from too short a time being allotted for a meal, or, from the mind being occupied during the meal with the idea of something to be done afterwards. Persons who took their meals alone very frequently read during them. But a solitary meal should be avoided if possible, for the mere presence of a companion, and, still more, occasional conversation, acted as a pleasant stimulus, and tended to maintain the nervous activity referred to in the first lecture as an important factor in perfect digestion.

Another cause of imperfect mastication was the condition of the teeth. Sometimes the teeth and gums were tender, or one or more teeth might be decayed, and the discomfort or pain occasioned in them by mastication led people to bolt their food, or to masticate on the other side of the mouth, if the tenderness was limited to one side. When all the teeth were gone, the person might chew perfectly well, not only by means of artificial teeth, but also without them. The effect of thorough mastication upon the food would vary a good deal according to the nature of the food itself; and tough substances, which could with difficulty be comminuted,

would be more indigestible than those which were readily broken up.

The fine subdivision of fatty food was of great importance in regard to its digestion. The more minutely the fat was subdivided, the more easily was it digested.

In regard to butcher's meat, also, there were great differences, depending both on the kind of meat used and its condition at the time of cooking; meat which was cooked before *rigor mortis* appeared, or after it had passed off, was tender; but meat cooked while *rigor mortis* still existed was sure to be tough. In the case of game, the practice of keeping the meat until it was actually commencing to decompose, was not without some danger; for not only might the products of decomposition formed in the meat, before it was cooked, be injurious but decomposition would be rather apt to occur more readily in the intestinal canal. The gastric juice, no doubt, had a considerable antiseptic power, and so had the bile; but these powers might be overtaxed, and eating high meat was one of the ways in which this might be done. It was, however, rather extraordinary to what an extent the consumption of decomposing food could be carried without any immediate injury, as was seen among the Esquimaux and Icelanders.

After referring to the importance of good cooking, and observing how unappetizing badly-cooked food was, the lecturer spoke of intemperance. The proper way to abolish drunkenness, he said, was to remove the thirst that led to it. The malnutrition which gave rise to a craving for alcohol might be a consequence of imperfect digestion, as well as of an insufficient supply of food.

But, besides cooking and mastication, a most important question had to be considered, viz., the kinds of food a person might eat. In a healthy man the best guide, both as to quantity and quality, was the appetite. Food eaten with a relish was, as a rule, wholesome. Too great a regulation of the diet was sometimes very injurious. But the palate and appetite alone would not serve as reliable guides to the quantity and quality of food. They had to be regulated by experience.

Dyspeptics might be regarded as a peculiar class of people, requiring fuller instructions as to diet than healthy people; and a few general directions, to them were by no means out of place. Thus, they might be directed to avoid new bread, buttered toast, muffins and pastry, all of which were difficult to disintegrate. They might be told to eat fish, or to prefer meat which had a short fibre, like mutton, chicken, or game, rather than take those meats where the fibres were long and tough, like beef.

There were some substances taken with food, which were utterly indigestible. Most seeds, when whole, were indigestible. Even when broken, like the kernels of nuts or almonds, they were sparingly digestible; and the same was the case with the skins of fruits, and the harder fibres and stalks of vegetables. Where the intestines were slow to act, such things as strawberries, raspberries, figs, nuts, prunes, and apples, might be allowed and even recommended; but where the intestines were irritable, all such things must be forbidden. Acid fruits were not only indigestible in themselves, but were apt to leave irritation behind. Some drinks were peculiarly liable to cause indigestion; for instance, sour wines, some kinds of beer, and tea.

Tea was better borne by the stomach, when taken with bacon or tongue, *i.e.*, with cured meat than with fresh meat, and it was partly owing to that fact that many people could drink tea at breakfast who could not take it at any other meal. When taken two or three hours after lunch, tea brought on acidity, probably because the contents of the stomach were much more acid at that time than at any other.

Amongst the poor the tea was so made as to contain a large proportion of tannin, which had an irritating effect; then, again, it was taken very hot, heat was a stimulant to the heart, but in this case, the heat would reach the heart directly through the thin diaphragm. Coffee had not such an irritating effect as tea, and cocoa was still less irritating.

Another cause of imperfect digestion was fatigue.

"How often," said the lecturer, "do we find that the meal taken by a person immediately after a long railway journey disagrees with him, and either causes sickness, diarrhœa, or a bilious headache. Forty winks after dinner is by no means a bad thing, but forty winks before dinner is frequently much better." Effects, somewhat similar to those of fatigue, might be produced by depressing or disturbing mental emotions or bodily conditions. Different emotions appear to affect specially, not only different organs, like the heart and intestinal canal but different parts of the digestive apparatus. Thus disgust affected the stomach, causing vomiting; fear was seen, in some of the lower animals, to affect the rectum, causing defecation; compassion affected the small intestine producing borborygmi; worry and anxiety, although they worked upon the stomach and lessened appetite, appeared to have a very special influence upon the liver.

They sometimes produced jaundice, and not unfrequently caused glycosuria; indeed, most of the cases of diabetes in middle-aged persons appeared to originate in worry and anxiety.

In treating cases of indigestion, or the consequence due to injurious mental influences, the depressing cause must be removed, if possible. If this could not be done, change of air and scene, with exercise short of fatigue, and in the open air, were serviceable. Bromide of potassium, either alone or combined with bromide of ammonium, was very useful, both in lessening the sensibility of the nervous system to worry, and in procuring sleep.

Gastric tonics increased the appetite, loosened flatulence, and tended to diminish the discomfort and languor which were apt to accompany indigestion. Another class of remedies was that of carminatives, which tended to disperse flatulence.

Amongst the most powerful of these were ethers and volatile oils of various kinds, charcoal and subnitrate of bismuth, which, however, produced their effects in a totally different manner. Closely allied to carminatives, he placed stimulants, including alcohols and ethers. He was not opposed to the use of alcohol, provided always that it was used in moderation; the infirm and aged required a little wine.

Treatment might also proceed on other lines; the products of waste had to be removed; purgatives were used with this object. A regular action of the bowels was important, not only by removing the indigestible residue of food, and thus preventing fecal accumulation, but by getting rid of some injurious products which had been formed during the process of digestion. Where the bowels were habitually constipated, a most useful thing was to give a small aloetic pill before the last food of the day, dinner or supper as the case might be. The use of such pills might be continued for very many years together, without the least impairment to the general health. The saline natural waters, or the salts obtained from them, were best given the first thing in the morning, and should be either warmed or given along with warm water.

There were two kinds of biliousness, *i. e.*, biliousness with two different conditions of biliary flow.

In the one kind, the stools were clay-colored, from the absence of bile; in the other, the stools were either normal or dark-colored, from excess of bile. Certain bodies belonging to the aromatic series had a very remarkable action upon the secretion of bile—some rendering it much more watery than before; others, again, making it so thick and viscid that it would no longer flow through the biliary capillaries, whence jaundice resulted. A blue pill and black draught always proved useful in such conditions.

Closely connected with cholagogues and hepatic stimulants, there was another important class of drugs, namely, alteratives. Nitrohydrochloric acid was a favorite remedy, and a very useful one in biliousness, and chloride of ammonium was much recommended. Another class of remedies was also useful in indigestion, viz., diuretics. By the frequent use of water as a diluent, either alone or with salines, the consequences of indigestion, in regard to the lungs, heart, and head, might be often averted or remedied.

One of the most important methods of treatment consisted essentially in passive exercise and abundant feeding. Treatment by massage increased the nutrition, both of the voluntary muscles and of the internal organs; and under its use patients, apparently hopelessly incurable completely recovered.

The lecturer concluded with a brief reference to a case in which this treatment had proved eminently successful.

THERAPEUTIC NOTES.

Taken from Lectures in N. Y. Polyclinic, by E. L. Fridenberg, M. D., Peoria, Ill.

VARICOSE VEINS.

Fluid extract hamamelis (Bullard & Crenshaw's) in teaspoonful doses three times a day. This treatment should be kept up for at least four months, and will give relief in every case, and in a majority of cases will effect a cure.

ERYSIPELAS.

Wash the parts with buttermilk every three hours, and give internally tincture of iron and quinine.

GONORRHÆA.

Take sol. corrosive sublimate, 1-500 (holding tight the urethra so as not to allow solution to enter the bladder) and inject two or three times, then wash out excess with pure water, and then give Vichy salts. Generally one sitting will perfect a cure. In the more chronic form of gonorrhœa use the following:

R Liq. plumbi subacet dil.	7 ozs.
Zinci acetatis:	5 grs
M. fl. sol.	

Sig. Inject three times a day

CONDYLOMATA ON TONGUE IN SYPHILIS.

Treat the same with the following:

R Corros. sublimate.	15 grs.
Ether,	2 ozs.

M. fi. sol.

Sig. The physician himself should apply this.

STONE IN THE BLADDER.

R Acid benzoici,	½ to 1 dr.
Soda bicarb,	1 to 3 dr.
Aquæ,	5 ozs.

Sig. Teaspoonful 5 times a day.

TO DELAY HARDENING OF PLASTER PARIS.

Add beer or milk. If plaster is old, put in a pan over fire.

HOW TO PREPARE ANTISEPTIC GAUZE.

Take ten yards of cheese cloth, boil in water, and after it is dry place in a solution of liq. Sodæ chlor. (1 pt. to 2 pts. water), and allow it to remain in this solution for forty-eight hours, after which time it should be taken out, dried, and placed in a jar of sul. corros. sublimate (1-5000) until wanted, when it should be taken out and wrapped in protective. Just before using it should be put in a sol. of corros. sublimate (1-000), and then squeezed out, when it is ready to be put on the patient.

IODOFORM GAUZE.

Dip dry gauze in sublimate solution (1-5000) and pepper it well with iodoform.

TO MAKE SOLUTION OF CORROSIVE SUBLIMATE.

R Corros. sub.,	30 grs.
Glycerine,	½ drm.
Water,	1 oz.
Salt,	20 grs.

Sig. Two teaspoonful to pint of water equals 1-2000.

ABSORBENTS.

Take clean cotton, boil it, dry it, and then place it in a 1 to 5 Labarraque solution, and put it in a solution of boracic acid, 15 grs. of boracic acid to 1 oz. of water.

HOW TO PREPARE SPONGES.

Get nice sponges, string them, and whip thoroughly until sand and dirt is out of them, then put them in a solution of liq. sod. chlor. (1 to 5), and allow them to remain for forty-eight hours. Then dry them and keep in a glass jar.

Method No. 2.—Whip, put in sol. permanganate potassium (5 grs. to 1 oz. water) for one half hour. Take out, wash in clear water, then dip in a solution of oxalic acid (1 oz to 40 ozs. water); leave in one-half hour, then wash out in clear water and let them dry in sun or hot oven.

CATGUT SUTURES.

For majority of operations four sizes of cat gut are needed—E, A, and G violin strings and minor harp. For amputation G strings. Take the strings, cut off the ends, and place them in bottle containing either alcohol or ol. juniper berries.

DRAINAGE TUBES.

Take chicken bones, place them first in ether, then in a 33 per cent. solution of hydrochloric acid for twelve hours, after which put in alcohol until needed.

ON CARDIAC WEAKNESS.

The functional disorders of the heart presenting themselves so frequently and in so varied expressions to the practitioner are not infrequently a severe tax upon his diagnostic acumen and his capacity to afford relief.

Aside from the cardiac depression resulting as an expression of sympathy from some existing pathological condition in the system, or some definite organic lesion, there is a functional weakness of the heart, due to faulty innervation of that organ. Dr. Seeligmuller, of Halle, speaking before the last meeting of German physicians in Madgeburg, held that this form of cardiac weakness could always be traced to two causes, viz., habitual sexual excitement without corresponding satisfaction and continued intense brain-work with insufficient allowance of sleep.

In the more definitely developed cases we find general weakness, excitement, and palpitation of the heart, pains in the epigastric region, profound reaction after even moderate physical or mental exercise, deepening occasionally almost into coma, persistent insomnia, hyperchondrical depression, failing nutrition in spite of good appetite, pallor, and slight cyanosis of the extremities and nasolabial region, and occasional fomication in hands and feet. If we examine the heart at different times of the day we can always note the weakness of the apex-beat and the heart-sounds, and the smallness of the pulse. The state of inanition is most favorable to present all symptoms of cardiac weakness. After arising, such patients usually have a pulse of about 40, after breakfast of about 50, and do not obtain a pulse of 60 before taking some wine or eating some meat. The normal frequency of the pulse is scarcely ever or only transiently reached. In very pronounced cases we meet with steno-cardiac paroxysms. Next to this persistent extreme cardiac weakness there is a mild, intermittent form often connected with great excitability of the heart (irritable weakness). Every excitement causes palpitation, tea or coffee insomnia, in these patients. It is difficult to decide in the single cases whether the seat of the neurosis be in the pneumogastric or sympathetic nerves or in the medulla oblongata. Intense mental impressions, no matter whether of a pleasant or unpleasant nature, tend to aggravate the existing evil. Persisting pains, neuralgic in especial, and traumatic accidents, cause likewise a frequent aggravation of the affection. Women having passed through confinements often complain of this ailment, possibly on account of the concentration of the blood in the abdomen. Improvement is generally obtainable in these cases by the wearing of a suitable abdominal bandage. In persons of an advanced age abnormal dilatation of veins in the lower extremities often leads to cardiac weakness.

The therapeutical measures to be employed are chiefly related to proper physical exercise, regulation of diet, and change of air. A sufficient allowance of sleep, especially before midnight, is to be insisted upon, and resting during daytime, even if sleep is not obtainable, is to be recommended. All violent physical strains are to be strictly avoided, while methodical, moderate gymnastical exercises, especially walking, are salutary. Forced cold-water cures are injurious, while warm baths, taken several times a week, are indicated. The diet ought to be strengthening and abundant. Coffee, tea, alcoholic stimulants and tobacco are to be entirely avoided. A prolonged stay at the seashore or in the mountains has often proved a beneficent measure. The thermo-baths of Gastein enjoy an especial reputation for this affection.—*Therapeutic Gazette.*

LOCAL APPLICATIONS FOR NIGHT SWEATS.

London Medical Record (abstract) Dr. Radakoff found Tinct. Belladonna very successful. His rules are: Apply freely so that the skin remains moist a lotion composed of one drachm of the tincture and one ounce of water. Undertake the rubbing not earlier than one or two hours before the usual time of occurrence of the sweats. This plan succeeds in 49 out of 50 cases. Dr. Nikolai recommends sponging of the entire body with a solution composed of 2 drachms of chloral hydrate in 2 glassfulls of equal parts of nates and brandy at a temperature of about 70° F. His best results were obtained in children suffering from non-phthisical night sweats.

COCAINE IN THE TREATMENT OF INFLAMED NIPPLES.

The limits of usefulness of cocaine do not seem to have been reached. The sphere of its therapeutic activity, is, on the contrary, constantly increasing. One of the peculiar features of the remedy is the promptness and constancy of its action. Its latest employment is that advanced by Unna in the treatment of inflamed nipples, in which affection he holds it has no rival in marvelously removing both pain and soreness. Every physician knows how troublesome and difficult it is to cure a fissured nipple if a baby is nursing it. To afford prompt relief, even while the child nurses, has not been hitherto accomplished. Cocaine is said to have succeeded in all cases tried by Unna and others. The nipple is to be brushed every ten minutes, in the intervals of nursing, by a weak solution (one-half to one per cent.) of the hydrochlorate of cocaine. Within one or two days the fissure will have healed completely, and all pain consequently will have completely disappeared. The bitter taste of the drug does not prevent the child from nursing, nor is there any danger of its absorption and consequent untoward effects in the child. It would even possibly benefit the child when irritable and restless.—*Therapeutic Gazette.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, OCTOBER, 1885.

THE SMALL-POX EPIDEMIC.

The epidemic of Variola which is playing such terrible havoc among the French-Canadian portion of our population, at the time we write (Oct. 26) shows no sign of abatement. The deaths are in the neighborhood of fifty a day, the large percentage being children under 5 years of age, who have never been vaccinated. The City of Montreal, somewhat late in recognising the possibility that the disease would take a strong hold on here has at last realized the serious state of affairs, and, assisted by a most energetic Citizens' Committee are working vigorously to stay the disease. Mount Royal Hospital, capable of holding some 300 beds has been opened on ground outside the city and is almost full. Additional accommodation is being rapidly added, and we have every hope that by the time this article will be read not less than a 1000 beds will be ready for occupation. An Isolating Committee are at work and are meeting with a certain degree of opposition. This is, however, fading away before the determined attitude of the Health Authorities, and we have every reason to hope that within a month every case in the City of Montreal will be effectually isolated. This done, we may reasonably hope that the disease will within another month be completely under control and rapidly disappear. The large amount of material which Montreal has susceptible to the disease, is due to the fact, that since the last epidemic—some five years ago—vaccination has not been carried on to any extent among the children born of French-Canadian parents. This is due largely to the most extraordinary antipathy which, as a class, they have against vaccination, but also to apathy of many of the physicians and midwives who attend them. The latter are greatly blameable, and are, in our opinion, responsible for the state in which matters now are. Some of them are anti-vaccinators at heart, which discreditable position makes them the scorn of the civilized world. Others, while believing in the efficacy of the operation, have not the courage to face the torrent of superstition and ignorance which surrounds them. We hardly know which to blame most. Although largely confined to the poorer French Canadian element the disease has appeared to a limited extent among the English-speaking population. A small number of deaths have occurred among them, but, as a rule, the cases are mild. In most of the cases where death has taken place the evidence of a primary vaccination was poor, and re-vaccination had never been performed. We have not heard of a single case occurring after a recent re-vaccination. We need hardly say that the damage to the business of the city is enormous, almost beyond calculation. We regret to add that some persons in sister provinces have attempted to make money out of our misfortunes. Good luck can hardly

follow money so obtained, while the scorn of all honest men will surely follow such contemptible efforts to obtain business. For the moment the City of Montreal is bowed down with sorrow, but the shadow will soon pass away, and the energy of her people will rapidly restore to her that trade which has made her—not only the chief trading city of the Dominion, but one of the most beautiful cities on this continent. Fifteen years ago the writer of this article—then a public vaccinator for a large section of the city of Montreal—drew the attention of the Health Committee to the constant danger of small-pox which beset the city from the yearly increasing number of unvaccinated children, and suggested the speedy adoption of civil registration as the best means of securing the vaccination of the greater number. This advice was repeated on several subsequent occasions, but it was deemed a boon impossible to obtain in this Province, owing to the system of religious registration in use. We are, however, pleased to state that the present epidemic is not without its bright side. It has shown those from whom opposition to civil registration was said to be sure to arise, that if small-pox is not to have constantly waiting for it thousands of victims, this can alone be accomplished by a thorough system of registration such as is on the statute books of England and of France. They now admit this fact, and where opposition was seen ten years ago, we now believe we may expect cordial support. In the meantime we hope that some of the practitioners who live in our suburbs will realise the obligation which science has imposed on them—and, by example and precept, proclaim to their misguided countrymen that in *vaccination* and re-vaccination we have an all but absolute preventive of "La Picotte" or Small-Pox.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The semi-annual meeting of the College of Physicians and Surgeons of the Province of Quebec was held on the 30th of September in the Medical Department of Laval University in the City of Quebec. The chair was occupied by the President, Dr. C. E. Lemieux. A resolution of condolence was passed with reference to the death of Dr. Alfred Jackson of Quebec, who for many years had been one of the Governors of the College.

Dr. Simard took his seat as one of the representatives of Laval University. The Board had been duly notified of his election.

The report of the Preliminary Examination Board was read. It showed that 56 candidates presented themselves, 23 of which were rejected on certain subjects while 5 were rejected for general deficiency. Two gentlemen who were in the North-West doing military duty, and who were therefore unable to go up for their Preliminary examination in May last (as they intended) made application for a favor. In September each was rejected on a single subject. They asked that if successful in passing these subjects next spring, that they be allowed to count the commencement of their studies—from September of this year. Upon a division this was granted them.

The report of the Treasurer from September, 1884, to September, 1885, showed a balance on hand of $1155.68.

The report of Mr. de Lamirande, the Agent of the College, showed that he had not been idle, and that several convictions for illegally practising had been obtained. The report of Committee on the financial condition of the College, presented at the last meeting of the Board was on motion adopted, with the exception of the recommendation to reduce the salary of the Registrar, which continues as heretofore. This report provides that there may be only one meeting of the College in the year, and raises the fee of the license to $25. These changes cannot come into force till adopted by the Legislature. A Committee composed of Drs. Lemieux, George Ross, F. W. Campbell, Hingston, Lachapelle, Austin, P. E. Mignault, Marcil, Marsden, Desaulnier, Ladouceur, Lanctot, Roger, Guay and L. La Rue were named to take into consideration the suggestions named at the last Tri-Annual Meeting of the College, with regard to the method of electing the Governors. The notice of motion given at the previous meeting, anent a Central Examining Board, as in Ontario, was referred to this Committee, which is to meet in Montreal.

A resolution affirming the Board's opinion as to the incontestible value of vaccination, as a safeguard against small-pox was unanimously adopted.

The following gentlemen took out the License of the College:

Graduates of Victoria College—Hilaire Gendreau, Alfred Laurendeau, Alfred Morin, Ferdi-

nand Simard, T. Daniel Caisse, Lucien Proulx, Arcadus Toupin, Joseph Jetté, Hormidas Brodeur.

Graduates of McGill College.—Henri Dazé, W. A. De Wolff Smith, W. Galt Johnston.

Graduates of Laval.—Chas. F. X. Prevost, Hector Palardy, Chs. N. Gauvreau, Louis A. Gagné, Gaston G. Smiltes, Louis F. Lepage, Leon O. Noel, Louis P. Picard, Joseph Houle, Jos. N. Legault.

Graduates of Bishop's College—Jabez B. Saunders, Frank R. England.

It was decided to print yearly the additions to the Register.

McGILL FACULTY OF MEDICINE.

The Medical Faculty of McGill College opened their new building on the 22nd of October, when there was present many friends of the School, and a large number of students. Representatives were also present from other Medical Schools in the city. D. R. P. Howard, the Dean, occupied the chair. Dr. Osler, formerly a Professor in this Faculty, but now of the University of Pennsylvania, and Dr. Pepper, of the same school, were present, and addressed the students in eloquent and appropriate terms. The new building is in every way admirably adapted for its purpose, and we wish the Faculty every success in their new quarters.

In the evening the Faculty entertained a number of friends to a dinner in the Ladies' Ordinary of the Windsor Hotel. The gathering was a very pleasant one, and it was two o'clock in the morning before the party separated, the Venerable Chancellor of the University, Hon. James Ferrier, remaining to the last.

CANADA MEDICAL ASSOCIATION.

The Eighteenth Annual Meeting of this Association was held at Chatham on the 2nd of September under the presidency of Dr. Osler. The attendance was good, and several papers of interest were laid before the meeting. It was decided to meet at Quebec next year. The following officers were elected for the year 1885-86:

President—Dr. Holmes, Chatham.

General Secretary—Dr. Stewart, Montreal.

Treasurer—Dr. Sheard, Toronto.

Vice-Presidents—For Ontario, Dr. Sloan, Blyth. Quebec, Dr. C. Sewell, Quebec. New Brunswick, Dr. Earle, St John. Nova Scotia, Dr. Wickwire, Halifax. Manitoba, Dr. Brett, Winnipeg.

Local Secretaries—Ontario, Dr. Wishart, London. Quebec, Dr. Bell, Montreal. New Brunswick, Dr. Lunan, Campbellton. Nova Scotia, Dr. Almon, Jr., Halifax. Manitoba, Dr. Good, Winnipeg.

COMMITTEES.

On Publication—Dr. Kennedy, Montreal; Dr. Fulton, Toronto; Dr. W. H. B. Aikins, Toronto.

Medicine—Dr. Cameron, Toronto; Dr. F. W. Campbell, Montreal; Dr. Saunders, Kingston.

Surgery—Dr. Kerr, Winnipeg; Dr. Kains, St. Thomas; Dr. Waugh, London.

Obstetrics—Dr. Holmes, Chatham; Dr. McKay, Woodstock; Dr. Campbell, Seaforth.

Therapeutics—Dr. Oliver, Kingston; Dr. Sloane, Blyth; Dr. Tye, Chatham.

Necrology—Dr. Fulton, Toronto; Dr. Graham, Toronto; Dr. J. C. Cameron, Montreal.

Education—Dr. Pyne, Toronto; Dr. Sheard, Toronto; Dr. Adam Wright, Toronto; Dr. Botsford, St. John; Dr. Allison, St. John; Dr. Arnott, London.

Public Health—Dr. Yeomans, Mt. Forrest; Dr. Grant, Ottawa; Dr. Harding, St. John; Dr. Robillard, Ottawa; Dr. Laberge, Montreal; Dr. Botsford, St John; Dr. Playter, Ottawa; Dr. Coverton, Toronto; Dr. Oldwright, Toronto; Dr. Boyce; Hon. Dr. Parker, Halifax; Dr. Kittson, Winnipeg.

THE melancholy death, by drowning, of Mr. H. P. Gisborne, manager of the Canadian branches of the New York Pharmacal Association, the Maltine Co., and Messrs. Reed & Carnrick, of New York, will have been learned with regret by many of our readers. Deceased was accompanying two friends to the Island in Toronto Harbor where one of them resides, but failing to gain access to the boat-house of the Argonaut Rowing Club, where a boat belonging to one of the gentlemen was kept, an attempt was made to enter the building by a window which was several feet distant from an adjoining wharf. Mr. Gisborne's companions passed over in safety, but, in making the jump, that gentleman must have missed his footing, and, in falling into the water beneath, struck his forehead on a projecting beam. The water was only about five feet deep, but it is said that de-

ceased never rose to the surface. It was some twenty minutes before the body was found when life was pronounced to be extinct. The occurrence took place on the evening of August 16th. His brother is the well-known superintendent of the Government Telegraph and Signal Service. As a business man Mr. Gisborne was well known. He made many warm friends and his loss will be deeply regretted. The management of the business has been, meanwhile, placed in the hands of Mr. R. L. Gibson, who has heretofore been acting as the representative on the road, and has been carried on as usual.

MATRIMONIAL.

Dr. Perrigo, Professor of Surgery in Bishop's College, who is to be married early in November, was entertained at a Dinner given by his professional friends at the Windsor Hotel, on the 29th of October. A number of unique presents was presented to the worthy Doctor whose health was heartily toasted. The chair was occupied by Dr. Kennedy and the vice-chair by Dr. Rodgers.

IODOFORMIUM ABSOLUTUM.

The Chemische Fabrik auf Aktien, Berlin (late E. Schering) has recently taken out a patent for the manufacture of iodoform by electrolysis, and has given the name of Iodoformium Absolutum to the product.

The iodoform thus produced is absolutely pure; it is a mild smelling, silky, delicate, and soft scaly powder of a pure citron yellow color. It can be easily reduced to a fine powder by trituration. It is no higher in price than ordinary iodoform, although iodoform as sent out now is a very different article in its physical properties from what it was a few years ago. There is still room for improvement, and those who are in the habit of using it much will welcome the advent of the new preparation.

LOCAL AND GENERAL.

I suppose there is no escape from discussing the issues that arise out of the small-pox epidemic, but I must confess that it is a subject fraught with slight interest for the Montreal medical man. He sees the ordinary means of arresting the plague neglected until it is too late, and then looks on while they are enforced with an enthusiasm worthy of a better cause.

Beyond vaccination and the isolation of patients in fairly well vaccinated districts I don't see that anything worthy of the name has been done to prevent the infection of the whole city. It is infected now, and, beyond the use of the small-pox hospitals for those who cannot be properly looked after at home and the vaccination of those who are not already protected, I do not see that it is worth while wasting money on such measures as isolation and placarding.

Thirty sanitary policemen to isolate two thousand cases of small-pox!

If there were not something extremely pathetic about the feeble eighteenth century notions of sanitation prevalent in this city one might consider this *the* joke of the season, but the idea of initiating genuine house isolation *in this city* at this stage of the epidemic with anything like twice thirty policemen is to invite the contempt of those who really do know something about the way in which the disease called variola attacks a city.

I have said *this city*, and by that I mean a city of (with its suburbs) 150,000 inhabitants, fully one half of which were not vaccinated effectively when the plague broke out, fully one-quarter of which are unvaccinated now,—probably the majority of these are opposed to and will resist vaccination in the future. I refer to a city the majority of whose inhabitants belong to the same class intellectually and physically that fell victims to cholera in the South of France, in Spain and in Italy—who are indifferent about sanitary matters, who ascribe, with apathetic fatalism, the visitation of the disease to *le bon Dieu*, and do not quarrel with His wise decrees; who rose, like the corresponding class in Barcelona during the cholera, and attacked the Health Office, and who wield just enough political influence to fetter the hands of men who, if left free to act, would conduct themselves like men, and not make the name of our city a term of reproach.

"They do these things better in France." When small-pox reaches other cities, the majority of whose citizens are of a different intellectual calibre, genuine isolation, genuine disinfection, and prompt vaccination are sternly insisted upon. No waiting for a small-pox hospital to be re-opened and furnished; no wasting of valuable time; no bandying of words; and no stupid consulting of the whims and wishes of the patient and his friends.

P. A. Lavers, M.D.

OBITUARY.

Dr. H. L. Vercoe (M.D., McGill, 1865) died at Toronto on the 28th of July last. He had practiced in Seaforth, Ont., for some years and gained the esteem of a large *clientele*.

Dr. J. R. Vicat (M.D., McGill, 1867) died lately in South Carolina from phthisis. He practised for many years at Richmond, Que., and was greatly esteemed.

Dr. W. G. Metcalfe, who died last August from a wound inflicted by a patient in the Rockwood Lunatic Asylum, Kingston, was a graduate of Toronto University, 1872.

PERSONAL.

Dr. John J. Gardner, Professor of Anatomy in Bishop's College, has been appointed physician to the Protestant Small-pox Hospital in Montreal.

Dr. Wolfred Nelson, (M.D., Bishop's, and M.D., McGill, 1871) has been appointed Medical Inspector for the New York Life Insurance Company for South America.

Dr. F.W. Campbell, of Montreal, returned to Canada by the Allan SS. Parisian, on the 27th of Sept.

Dr. Wyat G. Johnston, (M.D., McGill, 1884) has been appointed Pathologist to the Montreal General Hospital.

Dr. F. R. England, (M.D., Bishop's College, 1885) has returned to Canada—after six months passed in London, and commenced practice at Point St. Charles, Montreal.

The Rev. J. B. Saunders, M.D., Bishop's College, has been appointed Professor of Botany in his Alma Mater.

Dr. J. Wolf. Smith, (M.D., McGill, 1882) after some service on the line of the Canadian Pacific Railway, has commenced practice in Montreal.

Dr. C. O. Reilly, Superintendent of the Toronto General Hospital, after spending three months in Europe, returned to Canada by the Allan SS. Parisian, September 27.

Dr. McNeece, (M.D., McGill College, 1869), has been appointed Assistant Health Officer for Montreal.

Dr. Major has returned to Montreal after spending seven months on the European continent.

Dr. Buck (M D., McGill, 1862), Superintendent of the London Lunatic Asylum, has been granted four months' leave of absence, to recruit his health, which is somewhat broken down.

Mr. Keith, of Edinburgh, the celebrated Ovariotomist, lately paid a flying visit to Boston to consult with a surgeon of that city.

REVIEWS.

THE TECHNOLOGY OF BACTERIA INVESTIGATION.

Containing explicit directions for the study of bacteria, their culture, straining, mounting, etc. According to the methods employed by the most eminent investigators. By C. S Dolley, M.D., published by S. E. Cassino, & Co, Boston.

The Author presents this work with the hope that its perusal will stimulate careful study of the Schizomycetis by American investigators, and assist them in adding their share to the mass of facts concerning bacteria. If a condensed compilation of most that is known regarding the methods for investigating bacteria, presented in a comprehensive and convenient form, will accomplish this purpose, the Author's hopes should be realized.

The subject is considered in three divisions: In Part First general directions are given of the methods of obtaining bacteria from air, earth and water, and from the tissues of healthy living organisms, the methods of making microscopical preparations of bacteria, the various methods of staining, and the preparation of bacteria for photography are described.

A description is then given of the methods of conducting culture experiments, how to prepare culture media, the various sterilization methods, etc. How to conduct inoculation experiments, and methods for biological analysis, such as ascertaining the effects of sunlight, cold, heat, electricity and upon bacteria. The determination of their chromophyll, assimilating power, and the effects of antiseptics and poisons upon them, concludes this Part. Part II. describes the special methods for investigating pathogenic bacteria. The various diseases in connection with which bacteria have been found are considered seriatim, and the methods for studying the organism fully described. Part III. gives formularies for the preparation of the various staining fluids. Culture, media, mounting media, etc. To the working student in bacteriology, or those intending to become such, this book will be found invaluable, the only want felt in perusing it is that of illustrations, in the way of plates, cuts, etc. There is an entire absence of such; they would make the book more attractive, and greatly assist the student in comprehending the numerous descriptions. A useful feature of the book is the references to the literature on the subject under consideration, which appear at the end of each section; the names of the writers are given, with the title of the article and name and date of the journal in which it appears.

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GYNÆCOLOGICAL REPORT.

By E. H. TRENHOLME, M.D.,
Professor of Gynecology, University of Bishop's College.

Hysterectomy in cancer of the uterus.

Le Progrès Medical reports a case of vaginal hysterectomy performed by Dr. Tillaux for cancer of the neck of the uterus and metrorrhagia. As the womb was freely moveable it was easily brought down to the vulva with forceps. A sound was placed in the bladder, and having cut through the vaginal mucous membrane in front at its union with the neck, and detached it as far as the peritoneum, which was incised transversely, Dr. Tillaux then made a similar operation behind, where the womb was attached by the two broad ligaments only; these ligaments were then ligated and divided; the vaginal edges were brought together by one suture. A drain was placed under the peritoneum and the vagina washed out with iodoform gas. The drainage tube was removed on 4th day, and the patient discharged cured on the 21st day.

Dr. Terrier also reports a similar case, with equally favorable results.

The value of hysterectomy in cancer of the uterus is by no means a settled question. Much has been said against the operation—cases of cancer and the rate of mortality has been high—in fact, the operation is declared by some as unjustifiable.

From my own observation I am of opinion that it is a justifiable operation, when the disease is confined to the uterine organ and has not invaded the adjacent tissues. A case of extirpation was performed by myself some weeks ago, and though the patient has recovered from the operation without any serious drawbacks yet, the result has not been satisfactory, on account of the development of the disease among the pelvic tissues, the eradication of which at the time of the operation it was found to be impossible to accomplish. One serious objection to these operations is the drainage of the peritoneal cavity, which must result when the infiltrated condition of the adjacent tissues prevents the coaptation of the divided structures.

Taken early, before the cancerous disease has gone beyond the uterus, the extirpation of the organ seems to me to be a proper and justifiable procedure

The operation for Restoring the Uterus by shortening the round ligaments has lately been performed by Dr. Alexander, of Liverpool.

If the conception of this operation cannot be accorded to Dr. Alexander, yet to him is due the credit of being the first to demonstrate its practicability. The mode of operating is given as follows:—The first incision is to be made upon the pubic spine, and then extended upwards and outwards in the direction of the inguinal canal for 1½ or 3 inches, according to the depth of the subcutaneous fat and the skill of the operator. The fat is cut through till the glistening tendon of the external oblique is reached. Sometimes a dense aponeurosis is met with midway in the fat, which may be mistaken for external oblique, and lead to trouble if search is now made for the tendon of the external oblique. The first stage of the operation ends with the exposure of the tendon of the external oblique and the external inguinal canal with the intercolumnar fibres crossing it. If these structures do

not appear then the aperture must be dragged over the surface of the tendon till the ring is found. The finger now pressed in the wound readily detects the spine at one end by its hardness, and the ring at the other by its lessened resistance. The spine and the ring are the two landmarks for further procedure. Poupart's ligament below should warn against any searching for the ring below that structure. There should be no groping in the dark, all must be closely ascertained before the next step is taken. Cut through the intercolumnar fascia and deeper structures over all the extent of the external ring in its longest diameter. A nerve, vessels, fat, tendinous bands, and the round ligament spring out of the canal immediately. In fat people the quantity of fat conceals all the other structures. There is to be no haste to seize the round ligament, which is brought into view by everting the structures upward. The genital branch of the genito-crural nerve runs close to and along the anterior surface. At this point the ligament is round, often delicate, but easily recognized by its flesh-colored structure. Care must be taken lest it be destroyed by the forceps. Bands will be seen binding it to the adjacent structures, these are best divided with the scissors, taking the greatest care lest the ligament should be cut into. With patience and care it is freed, and comes out so easily that one is apt to think it has been broken.

At this stage it is well to cover the wound with a warm sponge and operate on the other side. The best position for the operator is on the side opposite to the one operated upon, as it affords the best view, and also enables him to make traction in the direction of the ligament.

Bands of fascia and fasciculi of the internal oblique have been mistaken for the ligament. They are, however, more friable, and, though they seem to go along the canal in the direction of the ligament, they do not pull out and should not ever be seen if the operation is properly made.

Third Stage.—This stage consists in placing the uterus in position with a sound, and pulling out the ligaments till they control the uterus. This is determined by the operator drawing out both ligaments at once till the sound (held by an assistant) is felt to move. The ligaments are now held by an assistant while the operator stitches them to both pillars of the ring, two stitches of moderately fine catgut on each side.

The bruised ends of the ligaments are cut off and the remainder stitched into the wound with the same suture that closes the incision. A fine drainage tube is inserted, and the wound well washed with antiseptic lotion before the sutures are secured. In private practice Dr. Alexander does not use the spray, but always employs a drainage tube. In cases of retroversion and prolapsus he uses a Hodge pessary to keep the organ in position during convalescence. Rest in bed is insisted upon for at least three weeks. The most important point in the 3rd stage is to secure the proper tension upon the ligaments. The drainage tube is removed on 2nd day.

The danger to life is *nil*, in an experience of over 3 years, whilst it has been successful in the case of retroversion and retroflexion as well as in cases of prolapsus of the uterus.

Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

Annual Meeting, October 9th, 1885.

T. G. RODDICK, M. D., PRESIDENT, IN THE CHAIR.

The annual meeting of this Society was held on Friday evening, October 9th, a large attendance of members being present.

The following were proposed for membership: Drs. R. F. Ruttan, W. McClure, F. G. Findley, S. Gustin and D. W. Eberts.

PATHOLOGICAL SPECIMENS.

Dr. TRENHOLME exhibited an *Ovarian Cyst* and *Two Extirpated Uteri*, and gave the following particulars:—

The ovarian cyst was removed from Mrs. I., of Shawville, aged 42, of spare habit and nervous temperament. Nine years married; no children. Her illness began 16 years ago, when her bladder troubled her. Feeling of pressure, pain in the back, inability to sit; bowels constipated; insomnia; menses always irregular, but for the last six months has no flow. At present time, pains are not so severe as formerly, and chiefly felt in the back and over the womb. Upon examination, the uterus is found high up and pressed above the pubis, but in the median line. A large dense tumor is felt to the back of the womb filling up the brim of the pelvis. This tumor is firm to the touch, smooth and uniform. On the left antero-lateral aspect of the tumor, a small

body is found connected with it. This was thought to be (as you now see it is) the left ovary. The tumor itself reached almost to the umbilicus. The depth of the uterine cavity was three inches. The tumor reached nearly as high as the umbilicus in the centre of the body, and well back toward the spinal column. The diagnosis was doubtful; at first inclined to ovarian cyst, originating with displaced ovary, but subsequently, from consideration of the history and the doubtful mobility of the uterus, etc., this was changed to uterine fibroid. As nothing special depended upon a more accurate diagnosis, the removal of the tumor was clearly indicated. The operation for this purpose was performed 12th Aug., 1885, assisted by Drs. Kennedy, Cameron, Perrigo and Reddy. There were also present Mrs. Lyon, Morrison and Saunders. The usual medium incision, three inches long, was made, and when the tumor was reached its real character was apparent. There were many adhesions both to the peritoneum and the uterus, those to the latter quite strong. About O iv of clear fluid were removed by Fitch's trocar, which, by the way, disappointed me in its working. A few bleeding points were secured by hemp ligatures and the sac of the cyst removed. The abdominal incision was closed and dressed in my usual way. The patient did well, the chief after-trouble being due to her nervous condition and some irritation of the bladder. Though rather prematurely, she left for her father's home in Iroquois on the 3rd of September, just three weeks and one day after the operation.

Extirpation of a Cancerous Uterus.—This specimen was removed from a lady 42 years of age. The general appearance of the patient was that of good health. For some months past she had been suffering from pains in the pelvis and left groin, which had become so severe that she consulted me about her case early in August of this year. Upon examination, the os was found to be cancerous, and the disease had invaded the upper part of the vagina on the left side to a slight extent. The depth of the uterus was about three inches, the organ movable, and in normal position. Believing the diseased tissues could be removed with some chance of success, and of possible temporary relief—at the patient's repeated and earnest request—the extirpation of the uterus per vaginam was performed on 20th Aug., 1885—seven weeks yesterday. In this, the first and only operation of the kind in Canada that I know of, I was assisted by Drs. Kennedy, Cameron and Perrigo—a number of medical men and medical students being also present. *Operation.*—After reaching Douglas' pouch, the fundus was brought down by means of a strong vulsellum; the right broad ligament was then ligated in small segments and divided. In this there was no very great difficulty; but when I attempted a similar procedure with the left ligament, to my dismay I found it so densely infiltrated with the disease that I had to content myself with dividing the remaining structures, guided by the sense of touch alone. There was but slight hemorrhage, and after the removal of the uterus I scooped out a quantity of cancerous tissue with Thomas' serrated spoon. There was some slight hemorrhage a few hours after the operation, which was easily controlled; and but for the escape of the peritoneal fluid, which has given the patient a great deal of trouble, and also kept her weak, she has done well, and is now able to walk around her room. I trust, in a few days, she will return to her home. One remarkable feature in this case was the almost entire absence of suffering from the operation itself. The opening of the cavity of the peritoneum, as in this operation, becomes a serious contra-indication to its performance, inasmuch as it cannot be closed by sutures on account of the infiltrated state of the tissues rendering impossible an approximation of the edges of the wound.

Dr. GARDNER congratulated Dr. Trenholme on the success of the operation, but thought the case not a good one to select for this operation, as there was ample evidence of infiltration of the broad ligament. In such cases, gouging or scraping is all that should be attempted.

Drs. KENNEDY and HINGSTON also spoke against operating in these cases.

Dr. ALLOWAY gave a short description of a similar case under his care. He thought operating unjustifiable.

Dr. SHEPHERD asked Dr. Trenholme if his patient was in a better condition now than before operating, or if she was going to live longer. Dr. T. said she would not probably live longer, but she was free from suffering, and therefore better than before the operation.

Fibroid Tumor of Uterus (2 *lbs*).—The second specimen of extirpated uterus is of more than ordinary interest to me, as well as to the profession, because it is the uterus of the first woman who, in January, 1876, was splayed for the control of uterine

hemorrhage. The first operation gave the patient nearly ten years' lease of a life that was rapidly drawing to a close when the ovaries were removed. In fact, last March she was robust and fleshy, but foolishly undertaking exessive laborious work, congestion of the uterus was developed, with a distressing train of nerve symptoms that of late threatened a termination of her life. Her attacks of nervous distress occurred every nine days and lasted for nine days, and were followed by loss of flesh and strength. During the attacks the uterus greatly increased in size, and her symptoms were all referable to that organ. As all conceivable treatment, including incision of the tumor, etc., was of no avail, she determined to have the uterus and tumor removed. *Operation,* 24th Sept., assisted by Drs. Kennedy, Perrigo, Cameron and Armstrong, and a number of medical visitors and students being present.—The usual abdominal incision had to be somewhat modified so as to remove the cicatricial tissue of the former wound; this, of course, necessitated the division of a few muscular fibres of the recti muscles. The tumor was firmly packed in the pelvis, and strongly adherent almost all over its surface. The attachments to the bladder were markedly so, and led to the mishap of incising that viscus to the extent of about half an inch. After separating the uterus from its supports, etc., as far as the neck, a wire écraseur was passed around the latter, and tightened just sufficiently to control any hemorrhage. The tumor and uterus were removed by the V incision (as performed by myself many years ago), in the same way as in the last case operated upon in London, Ont., in May, 1883. The flaps were adjusted—after carefully securing all the arteries—by the double-running suture, the material used upon this occasion being the prepared iron silk. The bladder was sewed up in a similar manner. The cavity was cleansed and the wound brought together in my usual way by deep silver and superficial horse-hair sutures. A carbolized gauze pad over the wound, held *in situ* by three short straps of adhesive plaster, completed the toilet. It is now two weeks and two days since the operation, and, as the chart of temperature, etc., shews, her convalescence has been a remarkable one. The bladder has given no trouble, and, from present appearances, it will not be long ere this lady, for the second time, will be restored to the active duties of life.

Nephrectomy (first recorded case in Canada).—Dr. HINGSTON exhibited a kidney removed by him for hydronephrosis. The kidney was made up of a lot of cysts, containing, when pressed, a fluid similar in appearance to ovarian fluid, which became of caseous appearance on evaporation. The parenchymatous structure was all gone. No calculus or obstruction was found. The ureter, at the pelvis, was not discernible—nor exteriorly. The lateral operation was employed; there was no difficulty, and but very little general disturbance followed. The patient had suffered from hæmaturia and great pain in the right side.

Dr. Hingston, on being requested, promised to give a paper on this case at the next meeting. Dr. Shepherd, who had also removed a kidney lately, said he would read a paper on his case at the same meeting.

ELECTION OF OFFICERS.

Balloting for the election of officers for the ensuing year then took place, with the following results:—

President—Dr. T. G. Roddick (re-elected).
First Vice-President—Dr. J. C. Cameron.
Second Vice-President—Dr. Geo. Wilkins.
Treasurer—Dr. James Perrigo.
Secretary—Dr. D. F. Gurd (re-elected)
Librarian—Dr. T. D. Reed (re-elected).
Council—Drs. Geo. Ross, Kennedy and Rodger (re-elected).
Publication Committee—Drs. Kennedy, Geo. Ross, J. C. Cameron and Bell.

Dr. RODDICK thanked the Society for the honor done him, and said that at some future time he would give an address on the history of the Society.

A vote of thanks was tendered Dr. Molson for his past services as treasurer.

Dr. HINGSTON said that nine years ago, during an epidemic of smallpox, the Society passed several resolutions upholding vaccination, etc. He thought it might do good to endorse these now, and proposed the following resolutions:—

Be it resolved,—That this Society reiterates the opinion expressed nine years ago in favor of vaccination, and considers it to be the duty of every physician to diligently encourage, at the present time, the practice of vaccination and re-vaccination.

Resolved,—That the Secretary be authorized to publish the above resolutions in the city press.

Special Meeting, October 12th, 1885.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

A special general meeting of the Society was held to consider what action it should take with

reference to the proposed appointments by the Board of Health of a Committee of Physicians to visit at times and report upon the Civic Smallpox Hospital.

It was unanimously resolved :—

First.—That the Society has learned with much satisfaction of the completion of ample hospitals for the reception and satisfactory treatment of several hundreds of smallpox patients; that, judging from the reports of many medical gentlemen who have inspected the buildings, this Society is satisfied that the hospitals are eminently suited for the purpose intended, and will materially aid in giving the health authorities control over the present epidemic.

Secondly.—Whereas the members of the Society have learned of many incidents forcing upon them the conviction that the management of the Civic Hospital has been very far removed from what it should be to merit the confidence of the public, and they are aware that this feeling has prevented many physicians from advocating isolation of their patients by removal to the hospital, as well as caused many patients to refuse to leave their homes,—be it now resolved that, as it is of the utmost importance to secure public confidence in the entire management of the Mount Royal Hospitals, the Medico-Chirurgical Society respectfully urge upon the Board of Health the necessity for the appointment of a committee of well-known physicians whose duty it shall be to visit the hospitals at stated periods, examine into the management of all the departments, and report to the Board. Resolved, further, that it be a recommendation to the Board of Health that this committee consist of five members, to be composed of one from each of the medical schools and one, from the profession generally.

Thirdly.—Resolved, that the members of this Society, having learned that it is the intention of the Board of Health to appoint two resident physicians, one for each section of the Mount Royal hospitals, they hereby express their approval of such action, believing that it will be conducive to the best interests of the patients.

The Secretary was instructed to forward these resolutions to the Board of Health.

The meeting then adjourned.

Stated Meeting, November 6, 1885.

THE PRESIDENT, THOMAS G. RODDICK, M.D., IN THE CHAIR.

TUMORS OF THE OVARY.

DR. WM. GARDNER presented two ovarian tumors which he had removed from the same individual; the right one had been removed by enucleation of the cyst, and the left by ligature of a very broad pedicle. Troublesome hemorrhage occurred, which was with difficulty arrested by ligature and the thermo-cautery. The patient did well.

DR. TRENHOLME also presented a large ovarian tumor which he had that day removed, and which, on the right side, contained a large solid mass, which he looked upon as malignant.

FATAL PULMONARY EMBOLISM ARISING FROM SIMPLE FEMORAL THROMBOSIS.

DR. GEORGE ROSS exhibited the heart and lungs of a patient, under his care, who had died suddenly in the General Hospital. The pulmonary artery, on being laid open, showed its left branch plugged by a thick fibrinous clot, beginning an inch above the valves, the lower end lying loose in the main artery, and for some distance curled back upon itself. Still nearer the heart, and almost touching the valves, lay a second loose clot, about three-quarters of an inch long, having the same appearance as the first. The clotting extended far into the lung, and even some of the small bronchial branches were plugged. The right pulmonary artery and its divisions were quite similarly occupied by an extensive fibrinous deposit. The femoral vein was also shown, containing a clot several inches in length, and extending a long way down the internal saphenous vein.

The patient was a young woman who had presented the usual symptoms of a simple anæmia for some months, when she developed pain and swelling of the right leg. She was then admitted to the Montreal General Hospital, under Dr. Ross, when the existence of a femoral thrombosis was readily detected by the presence of a firm cord in the situation of the vessels. Her general condition was good, with the exception of a moderate degree of anæmia. One week after admission, after having passed a good night, she complained early in the morning of suddenly feeling faint; this soon passed off, and nothing more was thought of it. At 12.45 P.M she became suddenly breathless and much distressed. Stimulants were administered, but in fifteen minutes she was dead. The occurrence of pulmonary embolism was immediately suspected, and at the postmortem the condition already described was found.

Dr. Ross remarked that, although very frequently meeting with femoral thrombosis, it was the first time he had ever observed this fatal accident following from it. It had been his misfortune a short time since to meet with a sudden death ten days after a natural confinement, and a perfectly natural puerperium. An autopsy in this case likewise showed the fatal result to have occurred from pulmonary embolism, as had been suggested. The present case was of interest from the syncopal attack in the early morning, which no doubt was

produced by surprise of the heart at the arrival of a foreign body. Dr. Ross said he had been very much struck in both these cases by the great extent of the clotting through the branches of the pulmonary artery which must have taken time to form, although no pulmonary symptoms prevailed during that period.

EXCISION OF THE SPLEEN.

THE PRESIDENT (Dr. Roddick) exhibited portions of a spleen which he had removed a few days ago from a man in the General Hospital. The man had been struck by a loaded bucket of coal whilst in the hold of a vessel. The bucket, containing about a half a ton of coal, had fallen from a height and crushed him against the side of the ship. When brought to hospital he was suffering severely from shock, greatly blanched, and almost pulseless. There was a small wound in the left lumbar region between the last rib and crest of the ilium, which was bleeding freely. There was also fracture of several of the lower ribs on left side. Dr. Roddick enlarged the wound, and found that he came immediately on the intestines, the intervening muscular structures being all torn away, leaving nothing but skin covering the intestines. Through this wound he removed a mass of tissue, which, on examination, proved to be a portion of spleen; the wound was enlarged still further, and the hemorrhage was found to come from a ruptured spleen. The vessels entering the ilius were ligatured, and the spleen was without difficulty taken away.

The man only survived the operation about six hours. At the post-mortem the lower six ribs on left side were found fractured, the left kidney lacerated in several places, and the bladder full of blood. There was only a few ounces of blood in the abdominal cavity.

GUNSHOT WOUNDS OF THE TESTICLE.

Dr. JAMES BELL read a paper on gunshot wounds of the testicle, and reported two cases which he had seen in the late Northwest rebellion.

The first case was that of a young soldier, aged twenty-eight, who, whilst skirmishing before Batoche, was struck by a rifle-bullet on the outer side of thigh immmediately below and behind the great trochanter. On being brought to the field hospital it was discovered that the bullet had passed through the thigh, then entered the perineum at the root of the scrotum, and made its exit through the scrotum, carrying away a portion of the testicle. The portion of testicle that remained was extruded from the lacerated scrotum. After removing several pieces of clot in the track of the bullet, the parts were cleansed with weak carbolic lotion, the injured testicle was returned to its proper place, and the scrotal wound closed with catgut sutures. There was no hemorrhage or other troublesome symptom, and the wounds were dressed with iodoform and carbolized gauze. The patient was now sent by steamer to the base hospital at Saskatoon. On his arrival (some days after the injury) he was found to be suffering from urinary infiltration, due no doubt to sloughing of the tissues and the perineum, injured by the bullet. Extensive sloughing occurred, and his life hung in the balance for days, but the scrotal wound never reopened, although most of the left side of the scrotum sloughed away. When last seen, July 1st, his wounds had all healed; the right testicle was about half its original size, firm, free from pain and tenderness, and freely moveable in the scrotum. It had apparently quite recovered from the severe wound received two months previously.

The second case was that of a half-breed, æt. 32, who was found on the battlefield of Batoche, on the night of the 12th of May, severely wounded. He was brought to the field hospital for treatment, and was found to be suffering from a contused and lacerated wound, about two inches in diameter, on the back and outer part of left thigh, just below the great trochanter. The abductor longus muscle was torn and partially separated at its origin. The left testicle and the whole lower two-thirds of the scrotum were carried away. The right testicle hung down uncovered, and its lower half was filled with fragments of metal. The wounds were probably caused by the bursting of a shell. The wounds were washed and dressed, and the pieces of metal removed from the testicle. In a few days the lower half of the right testicle sloughed off, leaving an irregular granulating surface. The other wounds did well, and after a few days Dr. Bell dissected back the remaining portion of the scrotum, pared the edges, and brought them together over the testicle. The result was very satisfactory, for in a few weeks the scrotum was completely healed, and the remaining portion of the right testicle could be felt firm and painless within it.

Dr. Bell went on to say that the success attending the expectant treatment in these two cases

inclined him to the belief that hardly any laceration of the testicle could be so severe as to warrant castration, although from what he had been able to gather from the literature of the subject within his reach, immediate removal of the organ was recommended in severe injuries. All authors say that the injured testicle usually atrophies, and is sometimes the seat of neuralgic pain, so that, as far as future usefulness went, it might as well be removed at once.

The patients, however, are always pleased to have as much saved as possible. In the statistics in the surgical volume of *The History of the American Rebellion* the expectant treatment seems to have given better results than active operative interference; 586 cases are reported. The testicle was extirpated in 61 of these: 18 per cent. died. Of the remainder, treated by the expectant treatment, 11.9 per cent. died.

SEPARATION OF THE FIRST AND SECOND PIECES OF THE STERNUM.

Dr. BLACKADER reported a case of a young man aged eighteen, who, whilst exercising on the parallel bars in a gymnasium, felt something give away. On examination it was found that the first piece of the sternum was riding on the second; it was reduced without much difficulty, and kept in place with compresses and straps.

FRACTURE OF THE CLAVICLE WITH WOUND OF THE LUNG.

Dr. F. W. CAMPBELL reported a case of fracture of the clavicle, in a coachman, aged thirty, caused by falling off his carriage and striking his shoulder on the wheel as he fell. The outer fragment was driven backward, and the lung was evidently wounded, as there was a large amount of air in the cellular tissue. The man when first seen was in a semi-collapsed condition, and the whole neck was emphysematous. At first he was in doubt as to whether or not there was a fracture of the first rib, so he was sent to the General Hospital.

Dr. RODDICK remarked that wound of the lung is a rare complication of fracture of the clavicle, and that there are very few cases on record. The man had been under his care in the hospital, and it was with difficulty that he could get the outer fragment into position. But the man is now doing well, and the bones are in good position.

Progress of Science.

FOREIGN BODIES IN THE VAGINA.*

By THEOPHILUS PARVIN, M.D., of PHILADELPHIA.

The vagina has been more frequently the receptacle of foreign bodies than has any other cavity of the human organism, and the variety of these bodies has been greater.

Among those which have been voluntarily or accidentally introduced by the female herself, may be mentioned † hair-pins, toilet-pins, needle-cases, crochet-needles, pebbles, spools, a pepper-box, a cotton veil, sponges, the bobbin of a spinning-wheel, the reel of a sewing-machine, lead-pencils, jelly-moulds, pewter cups, the neck and shoulders of a corked vial, the cup of a drinking flask, the socket of a brass candlestick, and the head and bust of a china doll. In regard to the last foreign body referred to, the history ‡ of the case was briefly as follows: A mulatto girl, thirteen years of age, in June introduced a doll's head and bust in the vagina, and in the succeeding November first complained of the suffering its presence caused; she assured her mother that she had swallowed the doll—her name was probably Sapphira—and it was only when partially anæsthetized she confessed that she put it in her vagina; both the truth and the baby came out under the influence of chloroform.

The motives which have led woman or girls to voluntarily place foreign bodies in the vagina have been many, though not as numerous as the cases. A purse of money has been put in the vagina for concealment; a sponge has been placed at the mouth of the womb just before coition, in order to prevent conception, and forgotten until many months after, when deterioration of health, offensive discharge and hemorrhages from the vagina, and pain, led to the suspicion, if not the diagnosis, of cancer. In some cases the foreign body has been pushed, in thoughtless play, into the mouth of the vagina—sent on a sort of exploring tour, just as children drop pebbles into a well, or throw them in a cave; while in others, a morbid desire for sympathy, or to attract attention, may have been the motive for its introduction. In some cases the foreign body has been put in the vagina to stop the monthly flow; in two instances, girls menstruating for the first time—ignorant, surprised, and fearful at the discharge of blood—sought to arrest it by putting a spool in the vagina. In some cases the voluntary introduction

*Read before the Philadelphia County Medical Society.

† Some in the list are taken from Briesky, "Die Krankheiten der Vagina," Billroth's "Handbuch der Frauenkrankheiten," while the authorities from which many of the others have been derived will be mentioned in the course of the paper.

‡ Dr. Smith, New Orleans Medical and Surgical Journal, February, 1884.

of these bodies can only be attributed to an insane freak, or an arbitrary and unreasoning exercise of will, just as we have given in one of Juvenal's Satires, an example of a mistress who has her slave causelessly whipped, declaring, if my Latin be not at fault, *Voluntas sit pro ratione.*

In many instances, the foreign body has been introduced purposely, but has been accidentally retained. Thus a girl* has used a needle to make her menstruation freer, or a woman a hair-pin to procure abortion, and the instrument escaped from her grasp.

In some cases the foreign body has been used for therapeutic purposes, and broken or become detached in the vagina. Thus a woman,* while taking a vaginal injection, loses the nozzle of her syringe; a troublesome leucorrhœa leads her after two months to consult a physician, and the lost body is found in the vagina. There are several cases reported where glass vaginal syringes have broken while in use, and the fragments remained in the vagina. In one of my patients, a married lady who had suffered from vaginismus, spontaneous fracture of one of Sims' glass dilators occurred when it was in the vagina, greatly to her surprise and alarm.

The foreign body may have been forced into the vagina by sitting down on it, or by a fall. A school-girl, on taking her seat, does not observe that a pencil is erect on it—the head below, the point above—and the pencil is thrust into the vagina, its point penetrating the bladder.

Jansen, of Ostend,† has reported the case of a woman who had an ale-glass, two inches and a half in diameter and three in height, in her vagina, which she asserted had entered from her sitting on it.

Trapenard‡ narrates the case of a woman sitting down on a faggot, being one of a pile; the faggot slipping, she falls some distance to the ground, and a triangular piece of glass and three spines of the acacia are forced into the vagina.

Salzer|| has narrated the case of a girl, thirteen years old, who in a barn, slid down a pile of hay several feet high, and thrust into the vagina the iron part of a "heurupfer," which was lying concealed in the hay near the floor; the part of the instrument entering the vagina was nearly four inches long, and included the pointed end, and the projecting hook two inches in length.

But according to Breisky,§ the most frequent accidental introduction of foreign bodies into the vagina has occurred in self-abuse—the body used escaping from the hand, and the party being unable to reach or to remove it.

The foreign body may be formed in the vagina. It is not uncommon to find in a patient who has suffered for some time from a large vesico-vaginal fistula, calculous concretions on the vaginal wall in the vicinity of the abnormal opening.

The foreign body may have come from an adjacent cavity. In case of recto-vaginal fistula, or where there is complete rupture of the perineum, fæces may be in the vagina, So, too, this accident has occurred even when the rupture of the perineum is only partial, as in the case of a young physician's wife, detailed by Breisky.*

Intestinal parasites may pass directly through a recto-vaginal fistula, or over the perineum, into the vagina. Thus there have been found in the latter oxyures, and the ascaris lumbricoides; but these are estrays, not true parasites of the female sexual organs.

Hausmann, in his work upon "Parasites of the Female Sexual Organs," states that in two instances he has found not only the ascaris lumbricoides in the vagina, but also the eggs; moreover, he has found in the vagina the eggs of the tænia solium. He mentions, too, a very curious fact, finding the itch insect in the vagina of a woman who had no external evidence of the presence of this parasite, the skin entirely free from disease, and he regards it as not at all improbable that under such circumstances the acarus was introduced in coition, for, according to Kuchenmeister, the acarusis in many cases abundantly reproduced upon the penis.

It may happen that a uterine fibroid undergoes calcareous degeneration, and some of the calcareous fragments, or the entire tumor, enter the vagina. Dr. Goodell† has given an illustration of the former, while Gaubius‡ has furnished one of the latter occurrence. The patient of Gaubius was a virgin who had a uterine calculus so large that after it entered the vagina he could not remove it until he incised the vaginal mouth.

The greatest number of vaginal foreign bodies are tents, tampons, and pessaries—introduced for therapeutic purposes and left, through carelessness or by accident, after these therapeutic purposes have been accomplished.

Uterine tents expelled from the uterus have remained injuriously in the vagina. Elliot|| has reported the case of a woman who, thirteen months after labor, suffered severe pain in the pelvis, and had such an offensive vaginal discharge that she thought she had "mortification of the womb." Upon examination, a tampon was found in the vagina, which had been placed there just after her labor to stop hemorrhage.

The number of cases in which pessaries have remained an injurious time in the vagina is very great, and hardly a practitioner of five years' experience who has not removed these foreign bodies. The late Dr. Atlee was accustomed to say in medical meetings, when the subject of pessaries was under discussion, that he had removed

*Schmidt's Jahrbucher, 1870, p. 308.
* Le Med. Practicien, January, 1882.
† Lancet, vol ii, 1850.
‡ Archives de Tocologie, 1881.
|| Berliner Klinische Wochenschrift 1875.
§ Op. cit.

* Op. cit.
† American Journal of Obstetrics, May, 1883.
‡ Journal de Medicine, par Vandermonde, 1759.
|| Boston Medical Journal, 1837.

more pessaries than he had ever introduced; plainly it was impossibly for him to accept Dr. Hodge's views of uterine pathology and therapeutics, as it was, for a time at least, for Dr. Hodge to accept Dr. Atlee's opinions and practice in the treatment of ovarian tumors. But, apart from exclusive views, very many pessaries, unsuitable in form or size, or unnecessarily applied, or worn for too long a time, need to be removed. In reading some of the histories of removal of such foreign bodies, one is often struck with the great length of time which they have been worn before their injurious effects compelled seeking professional advice.

Sutton* removed a glass ball pessary that had been in the vagina fifteen years; Desormeaux and Dubois† mention a case where a silver-gilt pessary had remained for twenty-five years; Goodell removed a glass disk after thirty years' imprisonment; and Sabatier‡ had a patient who had worn her pessary forty years.

It does seem extraordinary that the vagina ever tolerates these foreign bodies so long a time, and yet a case reported by Pearse || is almost as remarkable: his patient had had a cotton veil in the vagina for twenty years. So, too, the case reported by Hauff is very remarkable. A nullip.,§ twenty years of age, had introduced into her vagina a coffee-cup, eighteen centimetres in circumference, and three and a half centimetres in diameter; it was removed entire after having been worn two years and a half.

So far, reference has been made to foreign bodies that have been introduced into the vagina by the patient herself, or by accident, or by the physician for therapeutic purposes. Foreign bodies have been put in the vagina, by men, from thoughtless or designed cruelty. A country girl had worn for years, before coming under the care of Dupuytren, ¶ a pomade-pot in the vagina; some brutal soldiers, after making her the unwilling victim of their lust, had thrust in this foreign body

Among other of these abominable cruelties may be mentioned the introduction of the cone of a fir tree,* a turnip,† a large crystal of sulphate of copper,‡ a wine-glass, etc. Gunsberg || gives the case of an idiotic woman whose husband forced into her vagina a wine-glass, the stem of which was broken off; twenty-four hours after the cruelty was inflicted the wine-glass was removed not without some laceration of the vagina, a forceps and Sims' speculum being used in the removal.

Instead of one foreign body there may be two or more. Schroeder § mentions a case under his care in which there were a cockchafer and a pomade-pot in the vagina; in Trapenard's case, previously stated, there were four foreign bodies; other illustrations are furnished by the fragments of a broken syringe, by some cases of vaginal calculi formed in consequence of a vesico-vaginal fistula, and by oxyures. But the largest number of foreign bodies is given in those instances where a needle-case has been introduced closed, and when in the vagina is opened, the needles then escaping; Grenier ¶ has given two cases in which this occurred.

An interesting case has been given by Dr. Graham,** where there was not only a foreign body in the vagina, but there was also one in the bladder—a spool in the former and a hair-pin in the latter; the spool had been in the vagina three years, and it was supposed that the hair-pin, which was bent in the form of a crook, had accidentally entered the urethra when the patient was attempting to remove the spool.

In considering the consequences of foreign bodies in the vagina, the least frequent will be referred to first.

There may be a serious wound of the vagina immediately resulting from the foreign body. In several of the cases where glass syringes have broken in the vagina, the latter has been wounded. Dr. Oldham †† has narrated a case in which death followed such wound; the death occurred the twelfth day, from internal hemorrhage.

The foreign body may enter adjacent organs, or penetrate into neighboring tissues, partially or completely passing out of the vaginal canal. In a patient under the care of Dupuytren,* an ivory pessary, which she had worn for many years, had partly entered the bladder, and partly the rectum, so that it occupied not only the vagina, but the other cavities mentioned. The same condition was present in the case of Desormeaux and Dubois.†

In the case of the girl 15 years old, who had the vagina entered by a lead-pencil, the point penetrating the bladder, there was a calcareous deposit upon the part within the bladder. The removal, which was done six months after the injury was received, could not be accomplished until after an incision of the vesico vaginal wall was made.

Those cases in which the foreign body passes into the uterus, partially or completely, are most remarkable. The late Dr. Crowe, of Louisville, Ky., reported a case in which a Babcock's pes-

* Supplement to the American Journal of Obstetrics, January, 1882.
† Dictionnaire de Medecine.
‡ Medecine Operatoire, Paris, 1882.
|| British Medical Journal, vol. i., 1878,
§ Centralblatt fur Gynæcologie, 1879.
¶ Bibliothèque du Médicin-Practicien.
* Breisky, op. cit.
† Breisky, op. cit.
‡ Medical Times and Gazette, 1863.
|| Centralblatt fur Chirurgie.

§ Diseases of Women.
¶ Theses de Paris, 1834.
** Nashville Journal, 1858.
†† Lancet, vol. i. 1870.
* Bibliothèque du Médecin-Practicien,
† Op cit.

sary had in part entered the womb; in the *New Orleans Medical and Surgical Journal*, 1883, a case is given in which the socket of a brass candlestick, three inches and one-fifth in length, four-fifths of an inch in diameter, and having a rim an inch and a half in diameter, was found in the uterus; this foreign body had first been introduced into the vagina.

Dr. Lever ‡ reported the following case: A woman while applying some ointment by means of a bone netting-needle, to allay irritation of the vagina, is disturbed by some one unexpectedly entering the room, and sits down suddenly; the instrument is forced into the vagina, and through the vaginal wall; in her efforts to remove it, it passes entirely out of the vagina and lies in an oblique direction to the right side of the latter. Nearly seven months after its introduction, this foreign body, which was six inches long, was removed, the removal being preceded by dividing it.

The foreign body remaining in the vagina may be incrusted by a mineral deposit. This deposit is composed of the triple phosphate and calcium salts. One of the most interesting specimens of such incrustation was presented, a few years ago, to the Philadelphia Pathological Society, by Dr. Getchell. || This calculus had been removed from the vagina of a girl nineteen years of age: it was three inches long, one inch and a quarter wide, three-eighths of an inch in thickness, and had been formed about a hair-pin as a nucleus. In the discussion following the presentation of the report and the specimen, the view taken by those Fellows who discussed the origin of such formations, was that they were usually derived from urinary salts. Such origin may be admitted as probable, though by no means proved, if there be a genito-urinary fistula; but if there be no such abnormal communication, how can urine enter the vagina, especially its upper part, where the foreign body is most frequently found? Breisky, in describing the effects of these foreign bodies in producing irritation, etc., of the vagina, states that the deposit comes from the stagnant secretions in the vagina, and he compares the foreign body thus incrusted to a foreign body in the bladder which serves as the nucleus for a vesical calculus.

A remarkable case of vaginal, uterine, and vesical calculus under the care of Prescott Hewett ⁕ occurred some years ago at St. George's Hospital. The patient had introduced into her vagina, eleven years before, the neck and shoulders of a large corked vial. The portion of the vial was covered with calcareous matter, and was in the vagina; the os uteri was blocked up with a mass which proved to be the cork similarly incrusted, and there was a calculus in the bladder: this patient had a small urinary fistula at the fundus of the bladder.

‡ Medico-Chirurgical Transactions, vol. xxxi.
|| Philadelphia Medical Times 1873.
⁕ Medical Times and Gazette, 1854.

In some of the cases where perforation of the vesico-vaginal wall has occurred, the tissues gradually worn away by the foreign body, it has not been mentioned that any urine escaped from the vagina, and yet the portion of the foreign body remaining in the latter was covered with abundant incrustations; in one of these cases where the rectum and the bladder had each been entered by a part of the foreign body, so perfectly were the openings plugged by the body, it is expressly stated there was neither a urinary nor stercoral fistula.

Another consequence of the presence of a vaginal foreign body observed in some cases is the production of abundant granulations from that part of the vaginal wall with which the body is in contact, so that after a time the latter is more or less completely imbedded, hidden from sight and touch, it may be. There may be associated with this a very marked stenosis of the vagina, the lower portion being of full size, while a small aperture leads to the upper part which contains the foreign body.

In the case where a large piece of sulphate of copper was passed into the vagina, sloughing of the entire vaginal mucous membrane resulted. The victim was a girl seventeen years old, and the perpetrator of the crime a young man who introduced the foreign body after having had intercourse with the girl. A few hours after its introduction it was removed, and then weighed six drachms and a half.

In general the effects produced by these foreign bodies depend upon their form, size, material, the greater or less violence done in their introduction, and the length of time they remain.

They usually produce more or less irritation of the vaginal mucous membrane, with increased secretion. In many cases an obstinate leucorrhœa, compelling the patient to seek professional advice, leads to the discovery of the foreign body. The increased vaginal discharge is at first mucous, then muco-purulent, or purulent, or it may be serous, but after a time becomes more or less offensive in odor—in some cases so offensive as to suggest malignant disease, a suspicion which may be confirmed by the occasional or frequent occurrence of hemorrhages. The foreign body may interfere with the functions of neighboring organs, especially those of the bladder and rectum; hence vesical irritability or dysuria, or rectal tenesmus, in some cases dysentery.

The vaginal surface may be abraded, or ulceration of the walls occur from pressure of the foreign body; adding to these the offensive character of the retained vaginal secretions, we have the conditions which may lead to septic infection.

Kottman * has reported a death from this cause in a woman twenty-five years old, who introduced a spool into the vagina, and who had suffered from leucorrhœa several years. The spool was found

* Schmidt's Jahrbucher, 1875.

behind the cervix in the vaginal vault, and removed; symptoms of peritonitis were well marked, and the patient died; the post-mortem showed purulent exudation in the pelvic peritoneum, especially in the recto-uterine cul-de-sac at a point corresponding with that which the spool had occupied in the vagina.

Runnals † has reported a case of death from pyæmic pneumonia and peritonitis, occurring in a girl of twenty-four years, caused by the retention of a piece of sponge in the vagina; the measurements of the sponge, removed after death, were three and a half by two inches.

A girl, ‡ eighteen years of age, was admitted into Hotel Dieu, Orleans, apparently in the last stages of marasmus, and complaining of hypogastric pain, and diarrhœa. The next day she died, and upon post-mortem examination, there was found in the vagina a pewter cup, which had been introduced fourteen months before; it is stated that the cup could not be removed before dividing the pubic joint.

Dr. Kelly,* of Philadelphia, was consulted by a woman seventy five years old, who had worn a pessary fourteen years without inconvenience, until recently difficulty in defecation and urination, together with an offensive vaginal discharge, led her to seek professional help. The doctor, not without considerable difficulty, removed the pessary, but the woman soon manifested a typhoid condition, and died three weeks after the removal.

The presence of a foreign body having been determined by vaginal examination, by touch, mediate or immediate, by sight, where possible, and the vaginal examination assisted, if necessary, by examination through the bladder and the rectum, the plain indication is to remove the foreign body.

Here one cannot refrain from stating the very great advantages the practitioners of to-day have given them by Sims' speculum and anæsthetics in such removal.

An anæsthetic is not necessary in all cases, but is especially in children, and when the foreign body is large.

So far as methods of removal are concerned, these vary with the size and form of the body, and its material, and as to its being free or fixed in the vagina. In many instances the conditions require a new method to be devised.

In some instances the foreign body can be best removed by acting on it through the rectum. Thus Meissner removed a pebble from the vagina of a girl 2½ years old; of course very much less violence was done by the finger in the rectum than if it had been introduced into the vagina. Small round bodies can be best removed by throwing into the vagina a stream of water, while the perineum is retracted by Sims' speculum. The removal of fragments of glass, especially of a syringe, is often difficult; if forceps be used there is danger of breaking the glass, or of wounding the vagina; in the only two cases I have had to remove the pieces of a broken glass syringe, this was done by the fingers, and, in general, flat bodies are thus best removed.

One of the most ingenious devices for the removal of fragments of glass was used many years ago by Dr. Levis. A woman had a broken glass pessary in the vagina, and the efforts that had been made to remove the pieces had only resulted in reducing them to smaller pieces, comminuting them in fact; a severe vaginitis—due chiefly to the fragments of glass, but in part, probably, to the attempts at extraction—was present when the patient came under the care of Dr. Levis. He threw into the vagina by means of a syringe a mixture of plaster-of-Paris, and after two or three days removed the mass, the solidified mixture having fixed in it the various pieces of glass. This unifying process, so ingeniously resorted to by Dr. Levis, seems like a material illustration of Plato's axiom that the end of philosophy is the intuition of unity.

In some cases it has been necessary to reduce the size of the foreign body before extracting it. Thus Dupuytren broke the pomade-pot, and, by means of strong forceps, devised for the purpose, divided the ivory pessary in the vagina and in the rectum, removing one part through the latter, the other through the former. In other cases the vaginal orifice has been enlarged by incision, as was done by Gaubius for the removal of the calcified uterine fibroid, and by Sutton for the removal of a globe pessary. If granulations have fixed the foreign body, these must be detached by the finger, or divided by scissors.

If the foreign body have its size greatly increased by mineral incrustations, it is advised to remove these first. Another reason for their removal lies in the fact that in some cases the rough, jagged surface may injure the vagina when extraction is done. Sabatier speaks of his fingers being wounded by the "asperities of saline incrustations," which had made the tumor "as rough as a rasp."

In some cases the ordinary polypus forceps is an excellent instrument for removal of a foreign body, but this removal should then be made by sight rather than touch—a Simon or a Sims speculum being used to expose the vaginal cavity.

In others the foreign body has been so large that the obstetric forceps has proved necessary for its removal. Roux, probably, was the first to use the instrument for this purpose, though some since his day have suggested its utility, imagining they were proposing something new; this is like many other novelties in the medical world which are exhumed from the grave of years, or even of centuries.

Whatever means, manual or instrumental, are used for the removal of foreign bodies from the vagina, it is well to be guided by the words which

† British Medical Journal, July, 1882.
‡ Lancet, vol. i., 1848.
* Medical News, Philadelphia, 1884.

Blundell said could be usefully inscribed on one of the blades of the obstetric forceps: *Arte, non vi.*

In all cases where there is an offensive vaginal discharge, or any erosion or ulceration of the vaginal walls, antiseptic injections should precede, and for some time follow, the removal of the foreign body.—*Phil. Med. & Surg. Reporter.*

THE INFLUENCE OF HIGH ALTITUDES UPON PULMONARY CONSUMPTION.

Dr. Irving M. Snow thus writes in the *N. Y. Med. Jour.*, June 13: The treatment of pulmonary consumption has, at all times, been unsatisfactory to the physician, by reason of the certain and often rapid progress of the disease to a fatal termination. The disease is, indeed, often palliated by medical skill, but relief is usually only temporary, and life is rarely prolonged more than three years. During an experience of thirty-eight years, Dr Austin Flint states that he has seen but seventy-five cases in which an arrest of the disease took place, and in most of these the improvement was for a short time. Every physician is called upon to examine and advise the victims of consumption. It is a disease in which the doctor is early and frequently consulted, yet one-seventh of all deaths are yearly attributed to this cause in the United States, and in Maine 50 per cent. of all deaths between twenty and forty years are from consumption.

From the failure of the materia medica to cope with this disease, attention has been drawn to the modifying influence of climate upon chronic pulmonary disorders. The conditions of soil and atmosphere favorable to the development of phthisis pulmonalis are well known. Damp, ill-drained land, cold, humid air, sudden changes of temperature, lack of sunlight, anti-hygienic surroundings—all contribute to depress the general health and to occasion the fearful prevalence of consumption in low-lying districts and in large cities. It is, therefore, evident that, in the search for a climate for the prevention or cure of consumption, dryness of air and soil and the invigorating influences of sunlight must be substituted, for the deleterious conditions of ground and atmosphere mentioned above. That climate is a potent agent in the prevention of phthisis pulmonalis is demonstrated by the fact that a region of comparative immunity from the disease is found in high altitudes. Consumption is excessively rare among the native population of New Mexico; and it is stated by Dr. Archibald Smith to be an exotic in the Peruvian Andes at an elevation of 6,500 feet. Kuchenmeister and Lombard have estimated the altitude of approximate immunity in Switzerland at 4,000 feet, and at the Equator 9,000 feet. Dr. Herman Weber, an unquestioned authority on medical climatology, has also testified to the rarity of phthisis upon elevated table-lands. We may also see the influence of altitude in our own country; that while the mortality in New York city is 20 per cent., at an elevation of 2,000 feet above the sea, only 10 per cent. of all deaths are attributed to pulmonary consumption.

In America Dr. Denison, of Denver, has placed the altitude of comparative immunity from phthisis at 6,000 feet, and quotes the vital statistics of Denver, which, in four years and a half, show but fourteen deaths from consumption originating in the State, two of which were acknowledged by the attending physicians to have originated elsewhere. The analysis of the conditions of climate found in this area of so-called immunity in Colorado becomes an interesting study.

As the traveler passes from eastern to western Kansas toward the Rocky Mountains the landscape gradually changes. In place of luxuriant vegetation, vast cornfields, and numerous streams, the prairie becomes parched and arid, the water-courses waste to dryness, and the whole prospect shows the absence of rain. This difference can be appreciated when we learn that the annual precipitation of rain and melted snow at Denver, 5,300 feet above the sea, is 14.77 inches as compared with New York, where it is 42.70 inches a year. This dryness is favored by the loose, sandy nature of the soil, which absorbs and radiates heat and moisture far more rapidly than impermeable rock or clay. Constant humidity of earth and air predisposes most strongly to the development of phthisis and other pulmonary disorders, while dryness of soil and atmosphere gives to the inhabitant of high plateaux comparative exemption from disorders of the respiratory tract. Laennec mentions a locality where the dampness of the soil was of such a character that two-thirds of the resident population died of phthisis. Variations of temperature are less acutely felt in dry than in moist climates, where cold is bitterer and heat more oppressive. The sun is obscured and hampered along seas and rivers by a veil of cloud or mist, but when we reach the plains of Colorado the atmosphere is of a silver clearness, and those who have felt the exhilaration and comfort afforded by the sunlight of Colorado will appreciate the increased power of the atmosphere in transmitting radiant heat. There is found to be an average difference of 43° between sun and shade in Colorado as compared with Washington, where the difference is 23°. A general rule is given by Dr. Denison that "there is a difference of 1° between sun and shade for each rise of 235 feet." This in part explains the enormous diurnal variation of temperature complained of by Dr. Alfred L. Loomis. The physiological effect of light is to stimulate respiration, as is demonstrated by the observations of Bidder and Schmidt, who, finding that animals at rest exhaled more carbon dioxide by day than by night, equalized the elimination of carbon dioxide by depriving the animals of light. To the consumptive, whose hope of life depends upon the amount of sunlight and outdoor exercise he can obtain, the value of a climate like that of Colorado may be appreciated when we contrast its 320 sunny days annually with Boston, where one-third of the year is cloudy.

In proportion to the elevation above the sea, the atmosphere becomes cooler, the temperature being 1° lower for every 200 feet of elevation above the sea. This difference is not arbitrary, being subject to modification by soil and prevailing winds. The rapid absorption and radiation of heat give rise to great extremes of temperature. As compared with the sea-level, the fluctuations of temperature in Colorado are indeed large, the variation in Colorado Springs in July being 30° daily and 63° monthly, as contrasted with San Diego, where the difference is 13° daily and 31° monthly, the climate of the California resort being tempered by the moist warm winds of the Pacific.

Physiologically, heat is opposed to the stimulation of the nervous centres, as is shown in the greater energy of northern than southern races. Its influence upon respiration is also depressing. The observations of Dr. Parkes show the number of respirations to be about thirteen to the minute in the tropics, and sixteen and a half in England. The value of a cool climate in arresting incipient phthisis is well known. Dr. F. I. Knight, of Boston, has expressed the general sentiment of the medical profession by asserting that "the cold, dry air of high elevations is beneficial in cases of incipient disease of the lung." That the symptoms of consumption are often palliated by moist, semi-tropical climates is true, yet the digestive organs lack the stimulus of cold, the patient is exposed to the dangers of malarial poisoning, and the heat of summer forces the invalid to leave his winter sanitarium, and seek a cooler and less debilitating climate.

With the rise above the sea-level the air becomes rarefied, and the atmospheric pressure is considerably diminished. At the height of 5,300 feet the atmospheric pressure is twelve and a half instead of fifteen pounds to the square inch, and the proportion of oxygen is diminished 16 per cent. This extreme attenuation of the air produces important changes in the economy. The mechanical effect of the rarefied air is to increase the frequency and depth of respiration, and to accelerate the pulse. A greater amount of air must be inhaled to satisfy the demand for oxygen. Hence the lungs have a tendency to be completely filled, the elastic tissue of the vesicles is stretched, and the thorax is expanded to its fullest capacity. At moderate elevations the system quickly adapts itself to the lessened atmospheric pressure, but, when great heights are rapidly attained, as with aëronauts, copious hemorrhages from the lungs ensue, and even at the altitude of Denver hæmoptysis frequently occurs in consumptives in the stage of excavation. Dr. Denison says: "The lessened tension of the air and the increased frequency of respiration force the blood to pass more quickly through the lungs, and the rapid and perfect renewal of capillary circulation is opposed to the stasis of early and chronic inflammation. This improved capillary circulation, together with the more perfect expansion of the thorax, loosens and promotes the expectoration of mucus and inflammatory *debris*." Tissue changes take place more rapidly near the sea than at considerable elevations. The usual experience of new-comers to Colorado is that they lose flesh, and that the sensible perspiration is considerably diminished. With the expansion of the thorax and the increased depth of inspiration, a development of auxilia y muscles of respiration takes place, and the children born in Colorado have a wider girth of chest than children born in the Eastern and Middle States. As the natural stimulus of an organ is the element upon which it acts, a lung filled and obstructed with pneumonic, caseous, or tubercular matter is mechanically aided to throw off the adventitious substances which obstruct the air-passages. The symptoms of hectic fever abate, and the consumptive, relieved from his night sweats, chill, and harassing cough, is placed in a favorable condition for recovery. Finally, the rarity of the air produces complete and constant ventilation, which invalids secure by active or passive outdoor exercise. The purity of the air in Colorado is preserved by elevation above the sea, a thin population, and the constant influence of the sun.

The elements of atmospheric electricity and ozonized air I will not here discuss. Authorities state that the electric tension of the air is increased with elevation, as is also the amount of ozone.

The advantages of Colorado for pulmonary consumption have been too recently appreciated to enable me to present extended statistics as to its benefits. Relief is more certain to the consumptive who seeks the aid of its climate in the preliminary stages of the disease, before there is much loss of tissue. Of 202 patients, having been ill an average of two years before reaching Colorado, at the end of a year and nine months 47 per cent. were much improved, 22 per cent. were slightly improved, in 11 per cent. there was favorable resistance to the disease, and in 20 per cent. there were extension and advance. Among those of this number in whom the disease had reached the stage of excavation, at the end of two years, 35 per cent. had died, 40 per cent. were resident in the State, and the remainder had been lost sight of. Even this is a favorable showing for the last stage of a fatal disease. Often patients who reach Colorado with tubercular lungs in the stage of softening are obliged to seek a lower altitude, the morbid process being hastened in Colorado. Cases of uncured or chronic pneumonia and fibroid phthisis are frequently aggravated by the altitude and dry air, and cases in which tubercular infiltration is actively progressing, and those in which much lung tissue is involved, are not favorably influenced by Colorado. A contra-indication to high altitude exists in consumptives of advanced years with rigid chest-walls, and in patients with valvular disease of the heart.

A disputed point now comes up regarding the influence of elevation in hæmorrhagic cases. Patients in whom large cavities exist, with denuded blood-vessels near the pulmonary excavation, are

apt to have profuse hemorrhages from the stretching of lung tissue induced by the rarefied air. Dr. Reed, of Colorado Springs, has analyzed 70 cases in his own practice. Of 34 cases in the stage of deposit, 15 had bled before reaching Colorado, and in only one did hemorrhage recur. Of 34 in whom softening had taken place, 17 had hemorrhage, before and 7 after living in the State. The *rationale* of the cure in hæmorrhagic cases is ascribed to the cause of hæmoptysis, the breaking down of tissue being arrested. Nervous disorders, chorea, neuralgia, nervous headache, and also cardiac diseases, are often aggravated by the altitude. Yet I know a lady with lungs infiltrated with tubercule, with mitral insufficiency of the heart, and a martyr to facial neuralgia, a resident in the State about three years, who passes eight hours a day in the saddle, and is fond of mowing and irrigating her own lawn, who is an enthusiastic and jealous partisan of Colorado and its climate. That good results in phthisis are accomplished by a prolonged residence on the plains of easternColorado there can be no reasonable doubt, and cases of complete cure are not uncommon. Here is found a region sheltered on the west by the Rocky Mountains, which rise precipitously from the plain, the prevailing winds being from the south and east, possessed of a cool, dry atmosphere and a sandy soil, the heat being tempered in summer by daily showers. It would seem that all these conditions are favorable to the consumptive. The nearly invariable warmth of the morning allows the invalid to take daily rides or drives in the bright sunlight of a Colorado sky. Here is also found the stimulus, occupation. Invalids who have reached that stage of improvement which an active mind shows by a desire for occupation are able to find profitable employment in the diversified industries of the State. The vast cattle ranches furnish work for those who are able to live in the saddle. Gardening is a favorite pursuit. An Oxonian, whose lungs became tubercular during a sedentary student life, found profitable employment in selling strawberries from his own garden to the citizens of Colorado Springs.

Dr. Loomis objects to the Colorado climate on account of the enormous diurnal range of temperature. A perfectly equable climate was found in the Mammoth Cave, yet nearly all of the consumptives who engaged in that disastrous experiment perished in its sunless depths. If the lesser thermometric range of London and New York is more favorable to consumptives than the large diurnal variation of Colorado, why does phthisis pulmonalis decimate the population of London and NewYork while its development is rare in Colorado? Cold is most acutely felt in damp climates, and, moreover, the daily range of temperature in Colorado raises the heat to a point where the invalid can spend some hours in the middle of the day in driving or riding. During the winter of 1883, which I spent in Colorado Springs, in February the thermometer often sank at night to from 12° to 20° below zero, yet at noon the day was sunny and warm enough for hundreds of consumptives to drive up and down the streets of that pleasant little town; and it is further to be noted that this intense cold was not so disastrous to invalids as the damp, chilly winters common in the Eastern and Middle States. In conclusion, it may be said that the best results of the Colorado climate to consumptives are secured by a prolonged residence in the State, with the important auxiliaries of proper diet, clothing, and personal regimen, including discretion in taking active exercise.

THE IMPORTANCE OF SHAMPOOING AND GYMNASTIC EXERCISE IN THE TREATMENT OF EPILEPSY.

Dr. John Kent Spender thus writes in the *Brit. Med. Jour.*, May 2d: Whatever may be the healing virtue of "rest" in a surgical sense, there are diseases in the treatment of which too much bodily rest and too much sleep may be medically injurious; that is to say, they are injurious in adding to the lethargic dulness which is the natural sequel of certain morbid processes; so that our duty as physicians lies in counteracting, by outward means, the depressing effects of internal and invisible forces. I do not wish to say that drugs have been too highly estimated in treating epilepsy; their effects are more striking than in the treatment of most other diseases, and are one of the approximate certainties of medical art; but other remedial agencies have been valued too little. It may be proper to think of drugs first: but long ago Dr. Russel Reynolds recommended "wholesome mental exercise," and I wish now to add a plea on behalf of wholesome bodily exercise as well. Bodily exercise means bodily education, or the training of the muscles into stronger and more harmonious action; and by soothing and regulating the nerves, all the disorderly phenomena of epilepsy may be brought into comparative subjection and quietness.

Among the useful hints which have been offered by Dr. Radcliffe on this subject, he has warned us that the "sleepy epileptic" must be roused early, and made to leave his bed. Similarly, the stupid and idle epileptic must be summoned to his martial drill, and his senses kept "alive" by stir and movement. But even when the faculties are acute and femininely sensitive, the stultifying effects of the long-continued epileptic convulsion may be appropriately met by gymnastic exercises and systematic shampooing of the whole body. In February, 1884, Dr. Radcliffe kindly entrusted to my care an epileptic lady of middle age, refined in manner, but almost emaciated in form, and the mother of two healthy and happy young children. Medicines of a special kind had been long administered, including cod-liver oil; but, during the last few months, the steady improvement has been materially quickened by the following plan of action: The body is sponged with hot water every day; the arms are moved up and down frequently (this

expands the narrow chest), and clubs of moderate weight are raised with the hands. Walking in the open air has been encouraged on all possible days. Once a week, a professional shampooer comes and carries out a complete massage of the whole body. Two epileptic girls, children of farmers in a neighboring county, have rapidly improved under similar management.

What I have now written is probably quite familiar to experts in neurology; but Trousseau says nothing about it, and, in the best English monographs, the hygienic treatment of epilepsy receives scanty recognition. Assuming that a rational scheme of medication is adopted in any given case, I claim that regular shampooing and gymnastic exercises may greatly help our therapeutic work, and sometimes make all the difference between success and comparative failure.

APHASIA.

The *London Med. Times*, (April 11, 1885,) says: Aphasia may be briefly defined to be the loss of language owing to cerebral defect. This requires some further explanation. Language is to be taken in its widest sense as the faculty possessed by mankind of giving expression to the thoughts, either by word of mouth, gesture, or writing. The nature of the cerebral defect matters not, provided that its seat be the same; and, therefore, aphasia may come on with sudden onset or gradually, it may be preceded by coma and accompanied by hemiplegia, (with almost invariable custom) of the right side, and sometimes by anæsthesia also, or it may alone signify to the medical man the existence of cerebral disease, and may be a possible forerunner of even more grave mischief in the near future.

The loss of language may be, as the name would naturally imply, complete, but all degrees of incompleteness are also included. Some patients cannot utter a single articulate sound; others repeat one word in reply to every question or to express every want; the vocabulary of others is more extended, and may embrace half a dozen words, possibly all belonging to the same class; others again, misplace their words or only the terminations of them, a not uncommon form being that the patient uses the same termination to all his words. The intelligence in all these varieties may be unimpaired, and the patient is often much put out that he cannot succeed in so expressing himself as to procure his wishes being carried out. One of the most curious phases of this affection is where a person forgets entirely some one or more languages that he has been in the habit of using, but retains the power of conversing in another language which, it may be, he has had no occasion to use for many years past. It is possible that in such a case a close enquiry would elicit the fact that this particular language had been learnt at a different time from the others, perhaps at an earlier period of the patient's life, and consequently the memory of it may have been entrusted to cells not in immediate proximity to those harboring the other languages since acquired, the function of the latter alone having been abrogated by the malady under which the patient is laboring.

It will be obvious that, notwithstanding an eminent English authority, the present writer has decided to make no distinction between amnesia and aphasia. In so doing he is supported by all the most recent and most distinguished French writers, whose views have been very clearly summarized on this point in an excellent thesis lately published* which suggested the present paper. Amnesia, which really means loss of memory, cannot, it is believed, be usefully considered apart from aphasia, and it is for this reason that the definition of the latter term was made as comprehensive as possible.

Aphasia may be either sensory or motor. The former is the case when there is loss of the perception of spoken or written language; the latter includes the loss of articulate language, and of the power of writing. These various faculties may be lost independently, since they belong to different centres; but when the lesion is widespread they may co exist. Word blindness consists in the inability to interpret the written symbols of language, and it is noteworthy that it may be present though the patient is able to recognize correctly the individual letters. It is invariably associated with either hemiopia or some concentric contraction of the field of vision. Moreover, it is always right hemiopia that co-exists with word blindness. Word deafness consists in the more or less complete loss of the recollection of the meaning of sounds; the patient is not deaf in the ordinary acceptation of the word, but is in the position of one who is addressed in a tongue with which he is not familiar.

This is not the least studied of the forms of aphasia, but in return it is the one from which recovery is most apt to take place.

Of the motor varieties, aphemia is the loss of the recollection of the co-ordinated movements necessary for articulate speech. It is at once the most important and the best-known form, being the most common. It is, in fact, the classic form investigated with so much care and success by Broca. Etymologically the term aphemia might be used, as it often has been, as synonymous with aphasia; but the writer of the present paper believes that the balance of advantages is immensely in favor of using aphasia in the widest sense. As has been already stated, aphemia may be present in any degree—from absolute speechlessness down to what hardly seems to amount to more than forgetfulness. It is worth bearing in mind that it is a symptom often assumed by the malingerer. Numberless synonyms have at different times been proposed for aphemia; a long list of them may be found in the thesis above-mentioned. Agraphia, the only

*De l'Aphasie, par le Docteur Bernard. Paris: Publications du Progrès Medical, 14 rue des Carmes.

variety which remains to be noticed, may be regarded as bearing exactly the same relation to writing that aphemia does to speech; in other words, it is amnesia of the co-ordinated movements necessary to writing. It is in every respect comparable to aphemia; indeed, the two often co-exist. It frequently passes unnoticed, owing to the co-existence of right hemiplegia.

ON THE TREATMENT OF MIGRAINE.

To me migraine seems to be one of the many sudden discharges of energy which takes place at more or less regular intervals, and in obedience to more or less inadequate irritations, which discharges are due to exhaustion or defect of volume in superior inhibitory centres. Migraine is a malady of neurotic persons, and a neurotic person is one who inherits relative incapacity of one or many nerve centers. We are unable to say which center or system of centres is of defective volume in migraine, but seeing that signs of exhaustion are found in the head, speech organs, special senses, and if in the limbs generally on one side only, we may presume that the defective control is somewhat in one cerebral hemisphere. Most sufferers from migraine suffer on one side only, some on either side, but there have usually a "favorite side." In either the attacks are bilateral, vertical or occipital, or vary in position, often beginning in the occiput, passing over the vertex and finally settling in one temple and eye-ball. In one of my cases the attack begins just behind the left mastoid process in a limited spot like clavus; this is a hereditary case, and vomiting occurs. The treatment of migraine is not so blank a page as many writers would say that it is. Too often we are impotent to relieve a patient in his misery, but we may do much to postpone or diminish the seizures. In the epileptic fit we may do little; our hope lies in prevention. Still, even in the attack of migraine, we are not without resources. I shall not enlarge on the usual household expedients—on the quiet room, the easy posture, the feet in hot mustard and water, and so forth; but of drugs proper, two have seemed to me to be useful. In some cases guarana is as signally successful as it is helpless in others. In those it has often restored patients of mine to the duties and pleasure of life who were almost crushed by recurrent migraine. It answers best in the cases which begin with some slight warning in the early day. Guarana thus given in two or three doses at short intervals often cuts short an attack or wards it off altogether. Pure caffeine ought theoretically to have the same effect, but I have not carefully compared the two agents. The other drug is croton chloral, used in like repeated doses up to about 20 grains in all. In some cases migraine may begin at any hour and may begin suddenly; in others it continues 30, 40 or 50 hours, the patient meanwhile lying in a semi-conscious state of helpless misery. For such states we have no help. Ergot, nitro-glycerine, nitrine of amyl have not helped me much, but these drugs have able advocates nevertheless. Indeed as Burton says, "the manner of living is more to the purpose than whatsoever can be drawn from the most precious boxes of the apotheeary." Looking upon migraine as I do, as a defect of development, and seeing it, as we all see it, as a disorder taking its origin in childhood, we must base our hopes of cure upon a healthful life, a healthful growth, and a healthful education. The principles of such a method of rearing neurotic children, and the terrible consequences of neglecting these measures, have been set forth with singular clearness and wisdom by Anstie, and I have not a word to add to his teaching.

Dr. Eustace Smith, an able and practical physician, finds that a combination of ergot and strychnia is of great value in addition to means of a more general kind. Dr. Ross also relies greatly upon ergot.

When we have to deal with fixed morbid habits of adult life, we can no longer hope to eradicate the tendency to migraine by promoting equable encephalic development; we have now to do with a finished machine, but yet with a machine not incapable of modification.

The great rule for the migrainous is an even life—a course of life which makes no rapid and no excessive demand upon nervous expenditure, and which favors steadiness of nervous action by an almost slavish adherence to routine. If an unwonted indulgence at table will cause a migraine, so will an unwonted abstinence from food. Sleep, work, food, must, both in quality, quantity and time, be regulated with such care that the nervous functions may be impressed with a like uniformity. In woman the catamenial period disturbs this serenity of conditions. Migraine has no essential connection with uterine changes, for a woman who has "catamenial migraine," as it is sometimes called, may inherit it from her father and transmit it to her son; indeed, such a transfer is in my experience very common. The catamenia only set up the migraine as any other oscillation may set it up—as a dyspepsia may do it, or an annoyance or an unusual effort. The migraine, indeed, bears no definite relation to the flow: in some patients it precedes the flow, in some it accompanies, and in some it follows it. Menorrhagia and leucorrhœa are, of course, common abettors of migraine, but by virtue only of their general tendency to bring about anæmia and exhaustion. When in respect of healthy home and climate, and a regular mode of life, we have put our patient under favorable circumstances, we must search in no routine spirit for any defect of nutrition or disorder or function which may exist. If we are satisfied that all these matters are cleared up and set in order, we may turn to specific remedies. In my hands a combination of bromides with quinine has, on the whole, and in a great number of cases, answered best. After this comes cannibas indica and ergot, and after these chloride of ammonium. Arsenic,

advertised by Watson, has answered well with me in some cases, but not, I think, better than Strychnia and such general remedies as the compound tonic syrups and so forth. One more important point remains. Piorry pointed out thirty years ago, that migraine was due to the strain upon some local defect in the eye, although he was necessarily then without more precise knowledge of these defects. That headaches—severe and recurrent headaches—are often to be traced to such defects is now well known, but Mr. Hewestón, of Leeds, on a recent occasion produced several patients who had been cured of migraine properly so-called, by correction of astigmatism. Mr. Hewestón's paper was a remarkable one, and his statements required the closest attention. Migraine however spares no rank and no age, and has in the past no fewer victims among the illiterate than among the learned. Dr. Liveing has suggested that even epilepsy itself may be excited by optic defects in persons so disposed; in any case the researches of the next few years will do much to enlighten us on these points and I trust to increase our power of relieving one of the most harassing of the minor ills of mankind.—*Medical Times and Gazette.*

INCONTINENCE OF URINE IN CHILDREN.

Dr. J. Lewis Smith read a paper on this subject (*Obstetric Gazette*), in which he mentioned eight causes, two of which might sometimes be present in the same case:

1. Too great acidity of the urine, causing undue contraction of the bladder.

2. Increased quantity of urine.

3. The presence of stone in the bladder, in which case the incontinence is both diurnal and nocturnal.

4. Abnormal contractile power of the muscular coat of the bladder. The importance of this cause is shown by the fact that belladonna, which controls muscular irritability, is useful in such a large number of cases of enuresis.

5. Weakness of the muscular fibres constituting the sphincter of the bladder. This is rare in children in good health, and Dr. Smith gave an account of one case in which it was associated with spina bifida.

6. Reflex action through the agency of the nerves supplying other organs in addition to the bladder. In this class are the cases due to structural disease of the spine, ascarides in the rectum, phimosis, preputial adhesions, etc.

7. The dreaming of the child that it is in a convenient place for urinating. To this psychical cause attention has been directed by Dr. Roberts Bartholow. That the enuresis is to a considerable extent under the control of the will is shown in cases where the habit has been broken up by the sending of the child among strangers or to a boarding school, where the sense of shame has constituted an influence sufficient for the purpose. Numerous instances are also on record where a flogging has permanently broken up the habit.

8. Malformation of the bladder or its appendages. Dr. Madden has reported the case of a young lady who suffered from a constant dribbling of urine, both by day and night, in which he found, on examination, that there was a malformation of the right ureter, which discharged the urine from the kidney on that side directly into the vulva instead of into the bladder.

In the treatment the great point was to discover the cause. If the affection seemed to depend on the character of the urine, this was to be rendered as bland and unirritating as possible, and Dr. Smith said that since he had recognized the acid character of the urine as a frequent cause of incontinence he had been able to treat very satisfactorily quite a large class of cases which had formerly proved troublesome. It was his practice to endeavor to render the urine as bland as tepid water. If there was acidity he gave from three to five drops of liquor potassæ, well diluted, three, four, five, or six times a day, until the urine became neutral in reaction, and then to continue the alkali in just sufficient quantities to maintain the neutral condition.

When there was increased functional activity the great reliance was to be placed on belladonna. The tincture was the preparation commonly used in this country, and of this five drops might be given every night and morning, the dose being increased by one drop each day until the desired effect was obtained or the physiological action of the drug had become apparent. When belladonna was found efficient it was to be kept up for some weeks in full doses, and the quantity then gradually diminished. This agent had been highly lauded by Trousseau, who used it in large doses. Dr. Smith related a case in his own practice in which a girl eleven years old, who suffered from both diurnal and nocturnal enuresis, and who had previously taken belladonna and other remedies, was cured. The urine was highly acid, and the treatment which he prescribed was five drops of liquor potassæ three times a day (or more, if this was necessary to keep the urine neutral in reaction) and tincture of belladonna in nine-drop-doses, the quantity gradually to be increased to fourteen or fifteen drops.

If the enuresis were simply due to the large quantity of urine secreted, the liquid food was to be restricted, especially toward evening, and if diabetes were present, of course the treatment appropriate to that disease was to be adopted. In diabetes insipidus ergot was found to be of great service. Suspicion of the presence of a stone in the bladder would be excited by painful micturition, increased quantity of mucus in the urine, and sudden stoppage of the full stream. The use of the sound would confirm the diagnosis, and the stone could then readily be crushed. In every case of incontinence it was important to make a careful examination of the parts contiguous;

to the bladder, such as the rectum and the genital organs, for the existence of ascarides, phimosis, preputial adhesions, hardened smegma, etc. If the enuresis were due to paresis of the sphincter, a treatment very different from that of belladona was required, and here ergot, either alone or in connection with nux vomica or strychnia, was found very useful in restoring the impaired innervation and stimulating muscular contractility.

A considerable number of remedies which were formerly employed to a large extent for incontinence of urine were now seldom used, but some of them were still deserving of confidence in certain special cases. Among these was strychnia. In children under four years of age there was some danger in giving it, and it was better to employ nux vomica under the circumstances, but above that age it was perfectly safe to use it. Tincture of cantharides, although, as a rule, an unpleasant remedy, could sometimes be employed with advantage if given in small doses. Cubeb and vegetable tonics and astringents were also sometimes called for.

Dr. Smith referred to the use of baths, and douches, and to the suggestion of Trousseau, that the patient should be required to urinate as frequently as possible during the daytime.

Dr. J. W. S. Gouley said the most frequent causes of the enuresis were lithuria and polyuria, the latter being often met with in nervous children. Children, after they became two or three years old, did not wet their clothing in the daytime, but only at night. In some instances such children retained the habit until they were grown, and he had seen men twenty-five, thirty and forty years of age who were still subject to it. No amount of whipping could cure a child of wetting the bed on the contrary, corporal punnishment could do harm and only make the condition worse. Lithuria was much more common in young subjects than was generally supposed. When this was present there was not an accumulation of urine, but a constant enuresis, both diurnal as well as nocturnal. He believed that there should be both general and local treatment. He thought, however, that it was a mistake to attempt to make the urine as "bland as tepid water," as Dr. Smith spoke of doing. This would only increase the enuresis, as very bland urine, like pure water itself, was known to be irritating to the bladder. But in connection with the internal administration of iron, more particularly the old-fashioned tincture of muriate of iron, he had often afforded great relief by the introduction of the sound or catheter every two or three days. As a rule, the steel sound, if skillfully used, was preferable to the gum catheter. In both girls and boys (although the number of the former he had seen suffering from enuresis was quite small) he had observed excellent results from his practice.

Dr. Smith said, in regard to chloral, that he had not tried it in this connection, but it seemed to him that if it was given in nocturnal enuresis it would only tend to aggravate the trouble by inducing more profound sleep.

ACUTE PERITONITIS TREATED BY ABDOMINAL SECTION.

Mr. Frederick Treves thus writes in the *Med. Press*, May 6, 1885: A female, æt. 21, was admitted into the London Hospital on January 21st, 1885, suffering from chronic pelvic peritonitis following severe gonorrhœa. On February 25th, two months after the commencement of the chronic peritonitis, she suddenly developed the symptoms of acute diffused peritoneal inflammation. The sequel showed that a large chronic purulent collection, containing very offensive matter, had formed near the left pelvic brim. The walls of the abscess were formed partly by the pelvic peritoneum and partly by many coils of small intestine that had become matted together. The acute symptoms were due to the bursting of this abscess and the extravasation of its contents into the general peritoneal cavity. On February 26th the abdomen was opened under antiseptic precautions, the patient being at the time apparently in a very critical condition. The general surface of the peritoneum showed the ordinary appearances of acute peritonitis. The intestines, where in contact, were lightly glued together. A quantity of semi-opaque fluid mixed with flakes of lymph and pus escaped. The whole peritoneal cavity was washed out with many quarts of water and a drain introduced. The patient made a good recovery, and was allowed in the garden on the fortieth day.

Remarks.—The extreme fatality of acute diffused peritonitis—especially of that form due to perforation—and the acknowledged futility of the modes of treatment that are at present employed, give some support to the proposal that acute peritoneal inflammations should be treated by the same methods that are successfully applied to other acute inflammations, viz., by free incision and drainage.

This common and general surgical procedure has been already applied for the relief of the inflammations of certain of the serous membranes. It was at first adopted in connection with the smaller serous cavities, as those of the joints. It has been gradually and with increasing freedom applied in the treatment of inflammatory conditions involving the pleura. It has finally become a recognized means of treatment in certain forms of localized and chronic peritonitis, especially when purulent collections have formed. The author would urge the adoption of this principle in treatment in connection with acute and diffused forms of peritonitis.

TANNIN AS A SPECIFIC FOR CARBUNCLE.

Tannin is claimed to be a specific for carbuncle. The dry powder should be sprinkled on as long as it will dissolve. Every day the carbuncle should be washed and re-sprinkled with tannin. It is said that under this treatment the carbuncle soon heals, and without much pain.—*Cour. Rec.*

MEDICINES WHICH STIMULATE THE LIVER.

Podophyllin in small doses, is a stimulant of the liver. During the increased secretion of bile, the percentage amount of special bile solids is not diminished. If the dose be too large, the secretion of bile is not increased. It is a powerful intestinal irritant.

Euonymin is a powerful hepatic stimulant. It is not nearly so powerful an irritant of the intestine as podophyllin.

Sanguinarian is a powerful hepatic stimulant. It also stimulates the intestine, but not nearly so powerfully as podophyllin.

Irisin is a powerful hepatic stimulant. It also stimulates the intestine, but not so powerfully as podophyllin.

Leptandrin is a hepatic stimulant of moderate power. It is a feeble intestinal stimulant.

Colocynth is a powerful hepatic as well as intestinal stimulant. It renders the bile more watery, but increases the secretion of biliary matter.

Jalap is a powerful hepatic as well as intestinal stimulant.

Menispermin does not stimulate the liver. It slightly irritates the intestinal glands.

Babtisin is a hepatic, and also an intestinal stimulant of considerable power.

Phytolacin is a hepatic stimulant of considerable power. It also slighdy stimulates the intestinal glands.

Hydrastin is a moderately powerful hepatic stimulant, and a feeble intestinal stimulant.

Juglandin is a moderately powerful hepatic and mild intestinal stimulant.

Chloride of ammonium is credited with cholagogue properties, but it is questionable; nevertheless it certainly stimulates the intestinal glands.

Calomel is a powerful purgative, but whether it stimulates the liver is still *sub judice*.

Corrosive sublimate is a potent hepatic stimulant, but acts feebly on the intestines.

Sulphate of potssh is a powerful intestinal irritant, but its action on the liver is variable and unreliable.

Taraxacum is a feeble hepatic stimulant.

Dilute nitro-muriatic acid has a moderate stimulant action on the liver.

Boldo, bromide of potassium, nitrite of potash, and hard soap have each some stimulant action on the liver.

THE TREATMENT OF EPISTAXIS.

Introduce into the nostril, to a considerable distance upward, a piece of fine sponge, cut to the size and shape necessary to enable it to enter without difficulty, previously soaked in lemon juice or vinegar and water. The patient is to be kept lying on the face for a length of time, with the sponge in place. This, says *Lyon Medical*, is the procedure employed by M. Siredey for controlling epistaxis in typhoid fever patients.—*N. Y. Medical Journal.*

HOW TO SHRINK HYPERTROPHIED TONSILS BY CAUSTIC APPLICATIONS.

Among various cauties for local use in causing shrinkage of tonsillar hypertrophies, Dr. Chisholm (*Virginia Medical Monthly*) has found the chloride of zinc the most available and the least annoying to the patient. He employs it in the following manner: A wire the size of a fine knitting needle, is roughened for a half inch from one end so that it may hold a fibre of absorbent cotton twisted upon it. Dip this into a saturated solution of chloride of zinc and thrust it to the very bottom of the crypt, and keep it there for several seconds. When withdrawn the whitened orifice marks the cauterization. By renewing the cotton for each follicle several may be thoroughly cauterized at the same sitting without causing any annoying irritation to the throat. A very few applications will cause the gland to shrink, as will be seen one week after the destructive cauterization has been made to the interior of the follicles.—*Medical Record.*

CARBOLIC ACID IN INDIGESTION.

Berdoe has frequently treated acid dyspepsia with small doses of carbolic acid. He uses a solution suggested by Dr. Fenwick, containing one part of the crystalized acid in four parts of glycerin, and gives from five to ten minims as a dose, either merely diluted or mixed with nux vomica or liquor opii sedativus, the latter being added in case of pain. He does not attempt to explain the action of the drug, but suggests that its efficacy may be due either to its anti-fermentative power or to the anæsthesia which it induces in the gastric mucous membrane.—*N.Y. Medical Journal.*

IODIDE OF POTASSIUM IN INFLAMED BREAST.

Dr. Samuel Welch thus writes in the *Med. Press*, April 22d: Having been frequently disappointed with the ordinary remedies in the highly troublesome condition arising from the presence of milk in the breast after the death of the child, or in cases of still-born children, and having found that the effects of belladonna are often uncertain, and that purgatives, although certainly useful, are frequently unreliable, I determined to try the effect of iodide of potassium applied locally in the form of an ointment, and I have met with great success from its use in this manner.

The system I pursue is the following: I have the breast suspended in a sling to prevent all dragging, and pressure exerted on it by means of folded napkins. I then order a free inunction of the iodide of potassium ointment three times a day, administering purgatives internally. For the first two or three days, should it be necessary, I have the milk drawn off once daily by the nurse, and find almost invariably that after a few days all troublesome symptoms pass away, and my anxiety on the score of the milk is removed

PRURITUS OF WOMEN.

LOCAL TREATMENT.—All acquainted with the incessant suffering which some women undergo from pruritus at the period of the menopause, must be very desirous of being made acquainted with a prompt remedy for so distressing an affection. Whether it arise from the presence of prurigo, urticaria, eczema, herpes or whether it exists without any eruption at all, it is alike difficult to allay, as the great number of remedies which have been proposed testifies. Of these veratria is by far the most efficacious. When the pruritus is localised at the groins, arm-pits, walls of the abdomen, or behind the ears, gentle friction night and morning with an ointment, consisting of thirty parts of lard and a quarter of a part of veratria, usually gives relief. When the pruritus is generalised, the internal administration of the veratria is preferable. Two centigrammes should be made into ten pills with liquorice powder, of which from two to six should be taken daily, either half an hour before, or three hours after meals. Only one should be taken at a time, an additional one being given each successive day until the maximum of six (three milligrammes) is attained.—*Dr. Chêvon, in Le Progrès Medical.—Med. Times.*

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The *Canadian Pharmaceutical Journal* for November says the following decision was recently given by Hon. Justice Johnson in the case of the College of Physicians and Surgeons of Quebec, *vs.* Theobald Chive. The action was brought in the Circuit Court for $50 penalty under the Stat. 42 and 43 V., c. 37 and amendments, for practising medicine without being a registered licensee (10th April, 1883). "Two instances are specified: First, one Ad. Martel, whom he treated, and received thirty cents; second, Jos. Archambault, whom he treated, and got eighty cents (20th March, 1884). He pleads that he never practised medicine contrary to the Statute, but that he is a licensed chemist and druggist, and has a right to sell and recommend his drugs and wares, and that he did no more. Secondly, he pleads prescription. The plaintiff, in his declaration, alleges that the reason he did not bring the action before was the absence of the defendant from the province. There is no evidence of practising medicine or prescribing it in the sense of the statute. In the first case, the man Martel was suffering pain from inflammation of the bladder, and told the defendant so, and the latter recommended a lotion or liquid in a bottle for which he charged thirty cents. This would seem a small fee for a prescription by a physician, and was evidently only the price of the physic or stuff that he used and had a right to sell. In the second case, the witness says he was weak and wanted a tonic, and got two bottles for which he was charged and paid forty cents each. It would be straining the law to apply it to such a state of facts as this. The defendant is proved to be a licensed druggist, and he had a right to recommend his wares, and receive the price of them, which is all he did. I see nothing about prescription or limitation of action in the statute, and nothing was cited, but that is unimportant under the evidence.

No. 3,466. This is another case against the same man for another and different offence, under two sub-sections of sec. 88, *i. e.*, for illegally assuming the title of doctor, physician, or surgeon, or any other name implying that he is legally authorized to practice medicine or surgery, etc., or for assuming in an advertisement, a written or printed circular, or on business cards or signs, a title, name or designation of such a nature as to lead the public to suppose or believe that he is a registered or qualified practitioner of medicine, etc. There is a demurrer pleaded to this action; but I think the allegations are sufficient. They say that the defendant held himself out as a practising physician by printed labels on bottles of medicine which he sold, but using the words *Dr. Chive* on them. But there is besides a specific allegation that he has assumed a designation of a nature to cause it to be supposed that he is practising as a physician. Therefore, if he has by these labels

or otherwise assumed that designation *to himself*, so as to have the effect alleged, it is sufficient. The plea to the merits is the same as in the other case. There are two labels on which the words "*Dr. Chivé*" appears: one on a bottle of "*extract of tobenambour for flavoring ice cream, custards, etc.* The other is said to have been removed from a bottle, and reads "Pharmacie normale. *Elixir bechique pulmonaire du Dr. Chivé ex interne des hopitaux de Rouen* remede souverain pour la guerison des toux, etc., etc." The questions are: did the defendant assume a designation for himself, or were the printed labels of a nature to cause it to be supposed that he was a practising physician here? It could not be doubted, I think, that this man who pleads and proves that he is a licensed druggist has a right to sell flavoring extracts, or cough remedies. The only possible doubt would be whether in selling and labelling them in this manner he meant to pass himself off as a licensed doctor here. The words "Dr. Chivé" are there on the two bottles. Do they refer to himself or to another Dr. Chivé of Rouen? or, if they refer to himself, cannot he say lawfully that he was once Dr. Chivé of Rouen, and I have no doubt of the fact from the certificate of the mayor of Candelier, which is produced, and that he sells under his druggist's license here the things he learned to make there? There are three other bottles also produced. They neither of them have the words "Dr. Chivé" on them: but "dir. Chivé". which is said to signify that he is, and wants to be known as *directeur* of this "Pharmacie Normale" which he keeps, and has a right, under his license, to keep. It may be, perhaps, a device or trick—and that is what is contended for by the prosecution; but there are two reasons why I do not act upon that view of the case. First, in a penal action, I want clear proof; second, the principal witness, in the case, and indeed, admittedly, the instigator of it, is Dr. Thayer, who says he bought out this man's business a couple of years ago on condition he was not to return and resume it, but that he has returned and resumed the business, and is now being sued by the same person for $10,000 damages. That is not evidence of a kind that I can implicitly rely upon to convict of an offence against this statute, where the intent of the party is to be made apparent, an intent which is to be shown, not so much by direct proof as by the inference and reasoning of the witness. I think there is a fair doubt whether the defendant meant to pass himself off as a doctor, or merely to vend under his druggist's license, things that were made by another, or even by himself in another country where he could truly call himself a doctor. Upon the whole case—and considering the whole extent of the evidence, I think that the defendant cannot fairly be held to have assumed to practice as a doctor here, because he said on his labels that when he was in France he had been a doctor there, and made stuffs which he sells here under his license as a druggist.

Both actions were dismissed with costs."

LOCAL AND GENERAL.

Dr. Santvoord lately read a paper on "Obscure Cases of Weak Heart" before the New York Academy of Medicine—a paper that will amply repay perusal. I am sure it must occur to most of us that there are many cases of continued dyspnœa vertigo and headache, and combinations of these symptoms which point to cardiac trouble, and yet which cannot be referred to distinct valvular or other lesions of the organ. Dr. Santvoord in the treatment frequently used digitalis and nux vomica or strychnia with admirable results.

In these cases of weak first or second sounds, weakened cardiac impulse and reduplication of first or second sounds, caffeine often does good where digitalis is found to be inefficient.

The reader inclined to the belief that in acute diseases where there is cardiac weakness caffeine is to be preferred to digitalis. He thought Bramwell's explanation of the phenomena of reduplication, viz: that it is due to a synchronous action of the ventricles, to be the true one.

In the discussion that followed this paper it was pointed out that tobacco, digestive troubles, and faulty metamorphoses were very frequently the causes of weakened heart.

Some years ago Dr. Young of Hong Kong published in this journal a very interesting account of the condition of native medicine in China. Quite recently there has been published by the Methodist Episcopal missionaries, under whose control the institution is, the second annual report of the Soochav Hospital and Soochow Medical School.

The School has eleven native students, and the course laid down is very complete comprising a five years' curriculum, nine months session, and a thorough preliminary examination in Chinese Classics.

The lectures are in the native language. The students now have an ample supply of Chinese text books.

The Railway Age has an account of a certain physician out West who tried "to sell an abscess on the posterior part of his anatomy to a railway company for $10,000." The doctor, it seems, was going by train to Indianapolis for the purpose of attending a Democratic meeting there. The cars were full, and he was obliged to seek refuge in the baggage car and sat down, not only upon an egg-crate, but also upon a nail which protruded from the said crate, and entered, penetrated, and pierced that portion of the doctor's body which must necessarily come into use if one sits down at all. It further appears that the railway company had negligently omitted to scour this nail with brick or sand-paper, and had permitted it to become rusty. The result of the puncture, it is alleged, was an abscess, which caused the doctor great trouble, and even endangered his life. As a plaster to this wound, he now asks the railway company to pay him $10,000, and has called upon the court to enforce his request. The case is full of fine points —fuller of them than the egg-crate. Did the company invite and request the physician to enter the baggage-car and sit down on the egg-crate? Is it the duty of the company to polish up the nails in the egg-crates which it carries? Should not the doctor have looked out for nails before he sat down? Was the sore really an abscess, or only an old-fashioned boil? Was the doctor's blood in good order when he sat down on the nail, or did he inflame it unnecessarily by getting mad, and prancing around in warm weather, when he discovered that the nail had gone where it ought not? Can a man's blood be in good order in the midst of a "heated" Presidential campaign, and when he is on his way to a big political meeting? Might not the doctor in his enthusiasm have taken that method of nailing his colors to the mast, and only become sorry for it when inflammation ensued? Altogether the case embraces many very interesting medico-legal questions, and will, no doubt, result in settling many points hitherto undecided. It is a case of which it may truly be said that there is a point in it."

The exact value of the salicyl compounds in the treatment of rheumatism and rheumatic diseases is pretty well indicated in papers by Dr. J. S. Bristowe (British *Medical Journal*, August 22nd) and Prof. T. R. Fraser (Edinburgh *Medical Journal* July, August and September, 1885) and by discussion of the former paper by Drs. Latham of Cambridge, Dr. Pavy, Dr. Sidney Coupland and other well-known physicians. It is generally conceded that the anti-rheumatic action of the compound of salicin is to be classed with quinine in ague, and of iodine and mercury in syphilis. When twenty-grain doses of sodic salicylate or salicine are administered every two hours the temperature usually becomes normal in a day or two, and remains so if the treatment is continued.

Both Prof. Fraser and Dr. Bristowe point out that salicyl compounds fail in several important instances, viz: where there are complications of important viscera, persistent inflammation of a single joint, chronic rheumatism, gonorrhœal rheumatism and in rheumatic gout. Fraser also claims that these compounds are equally good in ordinary acute polyarthritis, in the variety that is associated with chorea and scarlatina, in acute muscularrheumatism rheumatic schleratitis and iritis, and in acute gout. Most Canadian practitioners can testify to their value in lumbago when it appears as a true acute muscular rheumatism.

This is how the Editor of the New York *Times* made himself merry over an article on microbes. After describing the prevalence of these minute forms of life, he says: It is very evident that all must make persistent effort to reduce the number of microscopic animals to at least the extent to which their predecessors reduced the number of wild beasts. Every man must become the protector of his own household. The cautious man will hereafter never venture to open his door without sweeping the front yard with his microscope, to see if the foe is at hand; and no one will venture out of doors without a gun loaded with carbolic acid, and without a microscope worn like a pair of spectacles, ready for instant service. Man will probably have to abandon his present house, as it affords little or no protection against the fierce bacillus; and he will be compelled to live in glass houses surrounded by ditches filled with carbolic acid, and provided with ventilators so contrived as to forbid the passage of the enemy. Governments will doubtless offer rewards for the capture or killing of microbes; and bands of scien-

tific policemen, equipped with powerful breech-loading microscopes, will ceaselessly hunt down the foe.

At last the Montreal Board of Health have decided to enforce the law regarding compulsory vaccination. In the meantime the variola fire has burned low for want of fuel, there being only eleven deaths from the disease on one day of last week.

It has been decided to serve a copy of the *Official Gazette* containing the law on the subject upon everyone who refuses or who has refused to permit himself to be vaccinated. Whether the matter will be further pressed or not remains to be seen.

At least one Municipality refuses to take any precautions or to adopt any effective method of repressing the disease. There is no placarding, no attempt at isolation, no public vaccination—only a stupid, apathetic, and ignorant trust in *le bon Dieu* who sent the scourge. It looks as if the disease will die out there only when every unprotected person has taken it. Why not bring matters to a crisis? If every one there *must* have small-pox why not have a grand mass-meeting for the purpose of contracting it—so get the agony over at once.

Unless the Central Board are determined to enforce vaccination in the locality referred to this appears to me to be the most logical procedure that can be devised.

P. A. LAVER, M.D.

MONTREAL, Nov. 24, 1885.

MRS. SOUTHWORTH'S FAMOUS BOOKS.

Messrs. T. B. Peterson & Brothers, Philadelphia, Pa., have just made a large reduction in the retail price of all their popular duodecimo publications, including the well known and popular books written by Mrs. Emma D. E. N. Southworth, Mrs. Ann S. Stephens, Mrs. Caroline Lee Hentz, Mrs. Catherine A. Warfield, Miss Eliza A. Dupuy, Alexander Dumas, and their several well-known and standard Cook Books by Miss Leslie, Mrs. Hale and others. These popular books will be found for sale by all booksellers, and they will now get a fresh impetus by the large reduction made in their retail price. The Messrs. Peterson will send their new Catalogue to any address, if written for, with the new and reduced retail prices annexed, and all Booksellers are requested to write for special wholesale rates, as Peterson's books always meet with large sales wherever shown and properly introduced, and they give large discounts and easy terms to the trade.

PETERSON'S 25 CENT SERIES.

T. B. Peterson & Brothers, Philadelphia, Pa., are now publising a Series of Novels at 25 cents each, which, for contents and neatness, have never been equalled, with hardly a dull line, and once taken up the reader will be loath to lay them down, mostly charming love stories. The capital novel of "Two Kisses," by Captain Hawley Smart, was No. 1. "Mam'zelle Eugenie," by the captivating French writer, Henry Greville, was No. 2. To be quickly followed by such first-class stories as "Worth The Wooing," by Lady Gladys Hamilton, "Her Second Love," "Saveli's Expiation," by Henry Greville, "Bertha's Baby," "Sylvie's Betrothed," "Just One Day," by John Habberton author of "Helen's Babies." "That Girl of Mine," "Matchmaker," "That Lover of Mine," "Handsome Miss Lisle," by Lady Gladys Hamilton, etc. These books will be found for sale by all first class Booksellers generally, and on all Railroad News Trains and Stands, or copies will be sent to any address, on receipt of 25 cents each, or five for one Dollar, by the Publishers, T. B. Peterson & Brothers, Philadelphia, Pa.

THE SMALLPOX EPIDEMIC.

We are sure all our readers will be glad to learn that the death-rate from smallpox in Montreal is rapidly decreasing. There is every appearance that, by the end of the year, the disease will probably have disappeared. We regret to hear, however, that it continues to spread throughout the Province.

PERSONAL.

Dr. Shaw (M.D. McGill, 1882,) has commenced practice in St. Johns, Que.

Dr. Robert Howard of St. Johns, Que., has been confined to bed for the past two months, suffering from a form of spinal disease. His condition is considered very critical. We are sure his many friends will hear of this with great regret.

Dr. Rowell (M.D., McGill College, 1884) has commenced practice in Montreal. At present he is lecturing on anatomy at Bishop's College for Dr. Gardner, the professor of that branch, whose whole time is occupied with his duties as physician to

the Protestant portion of the Smallpox Hospital. We hear that Dr. Rowell is a great favorite with the students and a first class lecturer.

Dr. Codd, of Winnipeg, has, we believe, been appointed Surgeon to the Mounted Infantry corps (regulars), which is being embodied in that city.

Dr. McNeece, (M.D. McGill) has resigned his appointment as assistant health officer in Montreal.

CORRESPONDENCE.

The following extracts from a letter written from the London Hospital to one of the Editors of this Journal may prove of interest to our readers:—Yesterday I saw a child with hydrophobia. "Oh, God, that I could paint a dying groan," then might I paint the unearthly expression of that infant's face when but the word "water" was pronounced. what a prolific ground for painters a hospital would be! But why should *we* seek the shadow when we have the substance before us? It is very useless for me to begin to write to you of London on less than ten sheets of foolscap, so I will drop the tempting subject and go to the hospitals for a moment. Sir Andrew Clark you know: he is a great man, but he is also among great men, and he fails to convince his associates that he has established his peculiar views on *Fibroid Phthisis*. I believe, however, that there have not as yet been found any bacilli in any case which he has called *Fibroid Phthisis*, and that will go a good way towards proving the non-identity of the different forms of *Phthisis*. Sir Andrew does not think, however, that bacilli are the cause of tubercle, but he is willing to say that where tubercle is there also are bacilli, and *vice versa*. As far as my experience goes I am of the opinion that the bacilli are not discoverable in the sputum until after a period when physical signs have made the diagnosis clear. In fact it is rare to find bacilli prior to a period when elastic tissue may be found in sputa, an absolute test of the existence of a cavity and usually of a tubercular cavity. Sir Andrew is an excellent ward teacher. He speaks in a clear voice, and is thoroughly systematic and practical. The name of Hughlings-Jackson is almost a household word in England. His acuteness in the diagnosis of nervous diseases has made him the greatest authority in England on that particular branch. His theory that chorea and epilepsy are caused by multiple emboli in the small vessels of the cortex and other gray matter of the brain is not considered proven, inasmuch as they fail to find such emboli *post mortem*, except in a very limited number of cases. The theory has this in its favor, however: *every* case of death at least of chorea has, *post mortem*, shown vegetations on the valves of the heart and in *half* of the cases endocardial murmurs have been made out before death. On the other hand, again, it is noticed that in nearly every case of *slow* death, the autopsy shows vegetations on valves, whether caused by chorea or not. However, his theories turn out, when he gives you a thing as a fact you need seek no better proof. He is one of the most careful men I ever knew, and for his great reliability, if for that alone, he is of priceless value as a clinician. Dr. Sutton who is not so well known as his colleague, Sir William Gull, is a great thinker and worker. He knows neither law nor rule in treatment of diseases. He is showing to the world by statistics that more of his cases get well without drugs than with them. You will smile when I tell you that I have seen him prescribe whiskey alone, in a case of acute articular rheumatism. I have known him as the sum total of the treatment to advise a patent with lobar pneumonia to sit up an hour a day and indulge in plenty of good, cheerful conversation! Whilst he is one of the most successful of physicians he is the rock on which many a student founders when he comes up for his final examination.

Of the surgeons at the London Hospital, Mr. Treese is the most popular teacher. He always prepares his case thoroughly, and gives it to you fully, yet concisely and to the point. He has a host of followers in the wards, and a large audience in the ampitheater. Mr. Bryant of Guys is known to every one by his excellent work on surgery. Not only is he authority on surgery but he is a born teacher. His voice is clear and musical, and not a word need escape the listeners. Mr. Bryant says, however, that he cannot keep his wounds sweet with corrosive sublimate solution, and uses a solution of iodine instead. The carbolic spray is still used in most of the London hospitals, but other matters of detail in antiseptic surgery are not so well carried out as in New York. The extreme politeness and cordiality received from the men whom I have met here is very pleasing to one. As I accepted a short season of work at the London hospital, I have not seen much outside, but may write you again in future.

"W. P. S."

THE CANADA MEDICAL RECORD.

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THE A. C. E. MIXTURE.

THE BEST ANÆSTHETIC IN OBSTETRICAL PRACTICE.

Read before the Montreal Medico-Chirurgical Society, December 18th, 1885, by A. LAPTHORN SMITH, B.A., M.D., M.R.C.S. Eng., Professor of Medical Jurisprudence, Medical Faculty, Bishop's College.

In case that some apology for reading a paper on this subject might be considered necessary, let me just for a moment recall the different anæsthetics at present in use, and see if any one of them fulfils all the requirements of the profession, either in general surgery, or more especially in midwifery practice.

The requirements for the best anæsthetic are:

1st. Absolute safety.

2nd. Capacity for producing anæsthesia, either complete or incomplete, according to the requirements of the case, and for a long or short period of time.

3rd. That the patient should go under it quickly and quietly, and come out of it rapidly.

4th. That it should cause little or no unpleasant after-effects.

I think we will all agree that none of the more generally-employed anæsthetics possesses all these advantages.

Nitrous oxide gas requires a cumbersome apparatus in which to carry it about, and as its effects are obtained principally by suffocating the patient, as evidenced by the blackness of the blood, it can only be safely administered during a period of time, so short as to suffice only for such trivial operations as extracting teeth and opening abscesses, etc. For such it is perhaps the very best possible, but, outside of the dentist's office, it is almost a complete failure, while even there it does not hold undisputed sway, when ever, by reason of the number of teeth or difficulty of extraction, more than a few seconds are required to complete the work.

The great objection to chloroform is the lack of the first requirement, absolute safety. Now, when I speak of absolute safety, I do not mean to credit this delinquent with all the deaths that are put down to its charge. It is manifestly unfair to put down to the anæsthetic the ordinary chances and hazards of life, and, still less, when the chances of death are considerably augmented by the unusual condition in which the nervous system almost always is just before an operation—to say nothing of the shock produced by the nature of the operation itself. To illustrate my meaning, I may recal two incidents, one related by Gross, that of a man who was to have a small sebaceous cyst removed from the scalp, and who, just before the operation, decided that he would not take an anæsthetic. The surgeon had scarcely touched him with the knife when he suddenly ceased to live. Now if the patient had even drawn a single breath of anæsthetic his death would most surely have been charged to its account. The other case narrated by Mr. Holmes was that of an old man with extensive disease of the heart. He was placed under chloroform, and the operation completed without any bad symptoms. A few days later he fell down dead while walking across the ward. If the ordinary chances of life, consistent with such

an organic disease, had brought his earthly career to a close on the operating table, his death would most unjustly have been put down to the anæsthetic.

But, apart from such cases as these, there are undoubtedly others in which death can fairly be attributed to the previous action of the drug upon the nerve centres of the medulla presiding over circulation and respiration, and in some cases upon the nervous ganglia in the heart itself, and, unfortunately, of these cases chloroform can claim the lion's share. The death rate at present is, I believe, 1 in 1600—good cause for anxiety to the man who has the responsible duty of administering it.

In spite of the advantages it possesses of rapidity of action and facility of administration, the lack of the qualification of safety is so great a drawback that it has been almost banished from American surgery, in the United States at least, where ether, in spite of the immense quantity of the drug required for an ordinary operation, in spite of its inflammability, in spite of its disagreeable odor both to the patient and to all the occupants of the operating room, and in spite of the unpleasant and long continuing after-effects,—to say nothing of the very great length of time it sometimes takes to get the patient under its influence, still holds almost undisputed sway in the opinion of most operators on this continent. It is true that some of the disadvantages are either gotten over or alleged to be removed by employing one or other of the inhalers, such as Snow's for chloroform and Clover's for ether. But Mr. Lister has shown that when chloroform is administered on a towel the air inhaled never contains more than 4·5 per cent of the anæsthetic; while in the case of ether inhalers, such as Clover's, there are valves which are liable to get out of order; and as the same air may thus be breathed over and over again, the patient is exposed to the risk of suffocation. The objection to ether that it is so inflammable is a trivial one comparatively, in surgical operations, where the surgeon can generally chose midday for operating; but it becomes a serious one in midwifery where the physician's services are required more often at night, and where the evaporating of a pound of such an inflammable substance in a closed room with a lighted lamp becomes a very temerarious proceeding.

The very fact that so many rivals to these three principal anæsthetics have sprung up and been tried in the balance, and found wanting, and that, with all their faults, ether and chloroform alone survive, shows that so far we have not yet in general use either an anæsthetic or a combination of anæsthetics which can meet all our requirements. That the profession has such a substance within its reach I believe I can show, and it is to advance the claims of this combination that I have undertaken the task of preparing this very imperfect paper.

Some six or seven years ago I drew the attention of this society to a combination of anæsthetics which I had first seen mentioned in a work by Dr. Harley on the diseases of the urinary organs published about 1874.

A mixture which was composed of alcohol, chloroform and ether, in proportions of 1, 2 and 3 of each, respectively, was highly recommended by the author for use in cases of uræmia where it was necessary or desirable to keep the patient anæsthetized for a considerable length of time, sometimes for as much as two or three days. As it would be dangerous to keep a patient under the influence of chloroform for so long a period, and as it would require an enormous quantity of ether for such a purpose, Dr. Harley conceived the idea of combining these two anæsthetics, and adding sufficient alcohol to counteract the depressing effect of the chloroform.

Of late years since the much more frequent use of the forceps, and a more highly cultivated sense of humanity, have led to the more general use of pain-destroying agents in midwifery, and as such cases frequently require such agencies for a considerable length of time, I have thought that such a combination would find an especially suitable place in the now somewhat ample bag of the obstetrician. Since then I have had the experience of over 100 cases with this anæsthetic combination, both in obstetric and in general practice, and now feel quite justified in giving it the highest recommendation as the best anæsthetic we can use. The greatest claim it has upon our favor is, I think, its almost absolute safety, and as we are frequently called upon to perform minor operations which we are anxious to do without causing pain, and while the importance of the operation does not warrant us in calling in another doctor, it is of no slight importance that the anæsthetic, the administration of which we must thus intrust to a layman, should be comparatively devoid of danger.

By using this one we can be sufficiently free from anxiety to be able to devote almost all our attention to the operation, while in using chloroform, one is hardly justified in performing even the slightest operation without assistance. But if it has any advantage on this score in general practice, it has it to a far greater degree in the practice of midwifery, for there we have often to deal with a nervous, albeit, exhausted and excitable patient, to whom the administration of chloroform is a proceeding requiring almost undivided attention on account of the danger, while the administration of ether so much increases the excitement that it would take a very smart man indeed to administer the vapor and to handle the instruments at the same time, but by using the A. C. E. mixture one can intrust it with safety to the nurse, or, as I often do, to the patient herself. In any very tedious case I hand the patient the bottle of it arranged with a sprinkler, such as is found on scent bottles, and allow her to use it as often as she likes.

The records of fatal cases of chloroformisation show that many of them occur in the dentist's chair. This has been explained by the fact that chloroform diminishes the amount of blood circulating in the brain, and that the erect position still further augments the cerebral anæmia, so that in these cases death is as much due to fainting as to the destructive action of the chloroform on the nerve cells of the medulla. For this reason ether is undoubtedly a much safer anæsthetic for dental surgery. But, on the other hand, it frequently takes so long to get the patient anæsthetized, during which time two skilled professional men are kept waiting, and, moreover, the period of excitement is so distasteful to the friends who generally accompany the patient, to say nothing of the large quantity of material required, that the administration of ether to a point of complete insensibility is both tedious and disagreeable.

For these cases, however, I have found the A. E. C. mixture especially suitable.

Many of the dentists in whose offices I have used it, testify enthusiastically to the rapidity with which the patient becomes unconscious, to the perfect quietness, absolutely free from excitement, with which they go under its influence, and to the very short time they require to completely recover. Of course this immunity from danger and absence of the period of excitation are due, the former to the presence of alcohol, and the latter to the presence of chloroform, in the mixture. It has long been the custom in many of the London hospitals to administer a dose of alcohol to the patient about to undergo chloroformisation, but is it not better and more effectual to administer the antidote with the poison rather than before or after it?

Another very important advantage is the almost total absence of vomiting.

Out of the one hundred and some odd occasions on which I have administered it I have never seen the A. C. E. mixture produce vomiting, although occasionally I have known it to cause nausea for a time, but not to anything like the same extent as that produced by ether or chloroform alone, So tedious used Mr. Clover, a few years ago, to find the use of ether alone, in producing anæsthesia, that he was in the habit of using laughing gas first, and continuing with ether only after the patient had become unconscious. But this is altogether out of the question in daily practice, where many a doctor has to be his own chloroformist. While in these cases in which he used chloroform, so fearful was Mr. Clover of its dangers that he nearly always took care to have it accurately mixed in proportion of half a drachm in a thousand cubic inches of air. But even this, while a perfectly safe procedure, is too complicated a one for general adoption, so that we would all probably gladly welcome any drug, or combination of drugs, that would combine safety, efficacity and smallness of quantity required. These desiderata are found, I believe, in the A. C. E. mixture. As the mixture only contains a third part of chloroform, which is admitted to be the dangerous element, we have the advantage of giving the poison in a comparatively diiute form, in other words before we can kill him with the chloroform we shall have anæsthetized him with the ether, and stimulated him with both the alcohol and ether. In other words again, the patient inhales four parts of stimulant for two of depressant.

It certainly is a matter of fact that we can produce complete anæsthesia during a longer period with six drachms of the A. C. E. mixture than we could with two drachms of chloroform alone. And while alcohol alone cannot be endured as an anæsthetic, introduced through the lungs, although the oldest employed through the stomach, yet when mixed with chloroform and ether it ceases to irritate the bronchial tubes.

The question may arise whether bichloride of methylene and the A. C. E. mixture are one and

the same thing." In reply I may quote Mr. Clover. who, in a recent article in *Quain's Dictionary of Medicine*, states that bichloride of methylene is an unreliable compound of chloroform, because the ether in it being more volatile than the other ingredients may after a time escape and leave a more powerful substance than we suppose we are handling.

He also says that it is better to mix, in small quantities at a time, one part of alcohol, two of chloroform and three of ether, and to keep the bottle so well corked that the ether is not likely to evaporate and leave chloroform in excess.

If we add up the chemical formula of these respective quantities of these three drugs we get a result very nearly approaching the theoretical formula of bichloride of methylene.

Although it is not quite certain that they are identically the same, it matters very little, as the effects of the A. C. E. mixture, as I have found them, correspond exactly with those of bichloride of methylene, as reported in many thousands of cases. While the only disadvantage which Mr. Clover sees in the bichloride of methylene, can be completely obviated by preparing the mixture fresh every time we use it, according to the A. C. E. formula.

At a meeting of the Medical Society of London in April, 1868, Mr. Marshall read a paper on Bichloride of Methylene, for the production of general anæsthesia. He had constantly used the anæsthetic during the past six months, both in private and hospital practice and for the performance of capital operations, and he has arrived at the conclusion that it is preferable in all respects to chloroform. It was more manageable than chloroform ; anæsthesia is more readily produced by it, and is more persistent; that there was less excitement, and what might be called inebriation, than in the case of chloroform, and that its exhibition was not followed by headache or prostration, nor so frequently by vomiting.

It had never yet proved fatal, and in those animals that had been killed by it there was found less disturbance of the equilibrium between the heart and the lungs.

Mr. Marshall mentioned several cases in which he had given the bichloride of methylene for tooth extraction, and he did not observe any of the disagreeable after-effects of chloroform to follow.

At a meeting of the Medical Chirurgical Society of London, October, 1871, in the course of a discussion on Anæsthetics, Mr. Curling, the president, regretted that no notice had been taken of the proposal of the Society's committee to use the mixed vapor of alcohol, chloroform, and ether. Mr. Spencer Wells said that he did not care whether chloride of methylene was merely a mixture of chloroform and ether, or not, as some said it was, he had proved it to be the best anæsthetic, and preferred it to all others.

Dr. Sansom said that while a mixture of chloroform and ether only was open to the objection that the ether went off first and left the chloroform, the objection did not hold when alcohol was added, as it had the effect of restraining them both.

In the *Lancet* of May, 1871, Mr. Rendle, the surgical registrar of Guy's Hospital, after stating that his opinion was based on personal experience of some hundreds of cases, says that the chemical composition of bichloride of methylene had not been found sufficiently uncertain by him to interfere practically with the physiological effects, and no dangerous symptoms had occurred in his practice.

He had decided to use no other, unless specially requested by the patient or operator; and he felt sure that anyone who would give it an impartial trial would be of the same opinion. He had given it for operations lasting one hour, when the operator was able to commence in three minutes, and recovery was rapid, and not followed by sickness ; and also for operations lasting less than a minute, where all was finished and the patient sitting up within 5 minutes, without the slightest unpleasant sensation.

Mr. Morgan, house surgeon of the Ophthalmic Hospital at Moorfields up to 1872, had given it more than 1800 times, and to persons of all ages, from a few weeks up to 91 years, but had never lost a case. He gave it from a perforated frame covered with flannel and fitting well to the face, 2 drachms at first, and 1 drachm afterwards when required. He only considered it necessary to watch the color and the breathing. He would never use anything else if he had his own choice.

Mr. Philip Miall, surgeon to the Bradford Infirmary, England, who has employed this anæsthetic in a large number of cases, states that insensibility in adults is usually produced in about two minutes ; one dose of a drachm being usually sufficient to produce anæsthesia. The respiration is usually quickened, the pulse lessened in frequency.

On account of the immunity from sickness of the stomach it gives this anæsthetic is much used in ovariotomy; and on account of the rapidity with which persons can be brought under its influence it is preferred in some English ophthalmic institutions where many operations are performed.

Sir Spencer Wells said, at the meeting of the British Medical Association in 1877, that he had, five years previously, made known his opinion that all the advantages of complete anæsthesia, with fewer drawbacks, could be obtained by the use of bichloride of methylene than by any other known anæsthetic. He had based that opinion on an experience of five years and three hundred and fifty serious operations. During the next five years, from 1872 to 1877, he had employed it in over six hundred cases of ovariotomy and many other cases of surgical operations, and that his former opinion had been fully confirmed. Given properly diluted with air, this anæsthetic had, in his experience of ten years—with more than a thousand operations of a nature unusually severe as tests of an anæsthetic proved to be, without a single exception, applicable to every patient, perfectly certain to produce complete anæsthesia, relieving the surgeon from all alarm and even anxiety; and its use had never been followed by any dangerous symptoms which could be fairly attributed to it.

With regard to the mode of administration, Junker's apparatus is certainly the best, as by this means the patient cannot possibly breathe the anæsthetic vapor without air, a current of which is pumped through the liquid to be inhaled, and with which it is charged to the extent of three and a half or four per cent. But as this apparatus necessitates the entire attention of some one to work it, it is more suitable for hospital practice where the services of a chloroformist can be retained. I use an inhaler consisting of a tin box made to fit accurately to the face by means of an air-cushion around its edges, which can be reinflated whenever the inhaler ceases to make a perfect fit. There is a wire cage containing a sponge upon which the anæsthetic is dropped or poured, and through which all air must pass to get to the patient. But any ordinary inhaler would do, and indeed in obstetric practice I prefer a handkerchief, which is less apt to alarm the patient whom I tell to moisten it with the A. C. E. mixture from time to time. In the intervals between the pains I tell her to keep it folded up tight in her hands. I do not consider it necessary nor advisable to render the patient completely unconscious. I prefer to content myself with merely dulling the pain until the head is coming through the vulva, when I allow her to take enough to put her completely under its influence. It must be remembered that the barometric pressure and the hygrometricity or moisture of the atmosphere makes a great difference in the amount of vapor given off from any volatile liquid. So that it is necessary to give the patient more air on a fine dry day than in dull wet weather. In fact, air is a thing that no anæsthetic or other vapor can for more than a minute or two replace with safety, and I can see no reason or right in crowding the anæsthetic into a struggling patient. If we want to produce anæsthesia by asphyxia we need not use ether or chloroform; simple nitrogen will do equally well.

To sum up: 1. It is an effective general anæsthetic, producing as deep insensibility as chloroform.

2. Its action is rather more rapid than chloroform, but to develop its effects more of it is required, the proportion being about as 6 is to 4.

3. It produces a less prolonged second degree of narcotism than other anæsthetics.

4. When its effects are fully developed the narcotism is very prolonged and is reproduced with great ease.

5. Its influence on the nervous centres is more uniform, and it creates little if any disturbances or break of action between the respiratory and circulatory functions.

6. The final escape from the organism is rapid. so that the symptoms of recovery are sudden.

7. In some cases, but very rarely, it produces vomiting.

8. When it kills it destroys by equally paralysing the respiratory and circulatory mechanism.

I feel sure that if any of you who have not tried it will give the A. C. E. mixture a fair trial you will not fail to be pleased with it. All those who have tried it have expressed their complete satisfaction with it, while for my own part, especially in my obstetric practice, I am simply enthusiastic.

Progress of Science.

A YEAR'S EXPERIENCE IN TRACHEOTOMY.

George M. Gay, M. D., writes, in the *Boston Medical and Surgical Journal:* During the year 1883 I performed tracheotomy twenty-one times for croup. Eleven patients recovered. All but one, a fatal case, were treated in the City Hospital. The cases were not selected, every one coming under our charge being operated upon if requiring it.

Many of the patients had diptheritic croup, a few membranous, and, occasionally, it was not easy to make an exact diagnosis. Cases presenting enlarged glands and a nasal discharge early in the disease were undoubtedly diphtheritic. On the contrary, cases beginning as an ordinary cold, with no membrane visible in the fauces, no septic symptoms, but having a severe and constant dyspnœa, were called membranous croup. It is not of the utmost importance that much time be spent in discussing the difference between the two varieties of croup, considering the fact that both are extremely dangerous to life, and that both demand essentially the same treatment. Suffice it to say, that all of the cases presented severe and continued dyspnœa, due to an acute laryngeal obstruction of from one to five days' duration.

One patient was twenty-four years (died); the age of the others varied from eleven months to nine years; a majority were four or five years old. The youngest who recovered was three.

The duration of the diseases at the time of the operation ranged from one to eight days; the dyspnœa from one to five days. As a rule, the shorter the period of obstructed respiration the more favorable the result.

No ether was used in eight cases, and only a few whiffs in the others; merely enough being given to partially control the struggling and fright. Generally, the patient had rallied from the anesthetic before the tube was secured in its place.

Two children died of shock and septicemia a few hours after the operation; the other fatal cases survived from two to five days. None died from hemorrhage. Death resulted from either bronchitis or blood-poisoning. Every case but one derived more or less temporary relief from opening the trachea, and, so far as I know, no life was shortened by the operation. The upper rings of the tranchea were usually incised, and also the isthmus of the thyroid, if necessary. In a baby lately operated on at the age of nine months the cricoid cartilage was divided with the result of greatly facilitating the introduction of the tube.

Venous hemorrhage was quite free in many cases, but no trouble was ever experienced from blood getting into the bronchi. By inserting a tenaculum or hook into the trachea just below the cricoid cartilage and lifting it up the windpipe is under control, and it is not necessary that the rings be exposed before they are divided. At all events I have not found it to be so in many of my later operations. Beginners, however, had better see the rings before they cut them. The tube having been secured by tape, a piece of cotton flannel spread with cosmoline is placed between the plate and the skin to prevent irritation.

After Treatment: Milk, ice-cream and beef-tea were the favorite articles of food. Nourishment was also administered by the rectum. Alcohol was never given unless the patient exhibited symptoms of marked exhaustion, when champagne was added to the diet. Several of the successful cases received no liquor during the treatment. Quinine and aromatic spirits of ammonia were given in every instance, while iron and chlorate of potash were not resorted to.

Next to nourishment I consider *steam* to be the most important part of the treatment. It is conducted from the radiator through a rubber tube, and directed upon the neck of the patient. The vapor is warm, moist, and does not condense in sufficient quantity to staturate the clothing. Atomized or medicated liquids are not used at present. Lime-water often produced a disagreeable erythma of the face, and thinking that possible it might act as an irritant to the air passages, pure steam was substituted, and so far it seems to act as favorably as did any of the sprays formerly in vogue.

In all cases the patient received steam half the time, while to the more serious it was constantly supplied. The very great benefit derived from breathing the warm vapors was demonstrated beyond a doubt in many instances. Under its use the secretion would soften, the respiration would become easier, the child would become quiet, and fall asleep. The importance of a constant and generous supply of steam cannot be over-estimated in this affection.

In the favorable cases the tube was worn from six to fifteen days; the average time being nine days and a half. I have found the most satisfactary way of getting rid of the tube to be as follows: At the end of a week, if the respiration is free, the tube is taken out quietly, and the child is let alone. No trials are made to see if he can breathe through his mouth. As the treacheal wound contracts natural breathing through the larynx is gradually restored. With one exception this plan has worked well. In the case of a little girl, after the tube had been taken out, occasional attacks of dyspnœa would come on, which were relieved by the nurse's opening the wound with the dilators, and turning on more steam. The child soon learned to call for this instrument whenever she felt an attack approaching. The use of the tube was not again resorted to, and in a few days the dyspnœa ceased and the patient recovered.

I cannot close this paper without calling attention to the importance of having intelligent, skillful and devoted nurses in charge of these patients. Two sets are necessary, one for the day and another for the night, and they should have received special instruction in taking care of the tube, and also in removing or placing it in an emergency. I cannot but feel that my success during the past year was due in no small measure to the admirable care which the patients received from the nurses of the hospital training.—*Louisville Med. News*.

BUTTERMILK IN SICK STOMACH.

Dr. R. J. Peare thus writes in the *Therapeutic Gazette*, April 15, 1885 :

An irritable stomach, it will be admitted, is often a most serious complication in the management of sickness. In occasional cases, of no particular gravity otherwise, oftenest in diseases of children, this difficulty leads to a fatal issue. Buttermilk, so far as I am aware, is an untried remedy in such cases. I have had some experience recently with it, quite satisfactory in a few instances. Four cases of persistent vomiting occurring in succession, intolerant of any other treatment, gave way kindly to this.

Case 1 was that of a child about two years old. The vomiting was unaccompanied by other sickness. The child had not retained anything, fluid or solid, for two days ; the food being almost immediately ejected. I suggested buttermilk in teaspoonful quantities, every ten, then every five minutes, the milk to be quite cold and as fresh as possible. The vomiting did not recur, and in two days the child had changed from a condition of impending death from collapse, to nearly its normal condition. In place of teaspoonful quantities, the stomach soon sustained larger ones, and so on till an ordinary quantity could be taken.

Case 2 was that of a nursing child suffering from a mild derangement of the digestive process, accompanied by fever and persistent vomiting while anything remained in the stomach. The mother's milk was immediately rejected. I again ordered buttermilk, in the same manner as before, much to the surprise of the parents. Next day the father reported that there had been no vomiting from the time this treatment was commenced.

Case 3. This was an adult female. Three weeks before she had been confined, and at this time was suffering from a mild attack of peritonitis, with constipation and nervous troubles. There was constant nausea in this case, even when the stomach was empty—a feature in which it differed from the other three. Buttermilk was cooled with ice, and carefully given in gradually-increasing quantities till it was retained quite well, after other remedies had all failed, and in twelve hours it could be taken freely. The nausea was overcome with more difficulty in this case than in the others.

Case 4 was that of a child one year old and weaned. The mother had been away from home some distance with the child, visiting. While absent, a slight diarrhœa occurred, accompanied by sick stomach. When I saw it the stomach difficulty predominated greatly. Everything given was immediately expelled with force. The mildest remedies were not retained a moment. The stomach was intensely sour, and food taken therein days before was passed from the bowels undigested. Buttermilk, as directed in the other cases, was ordered, with lime-water. The vomiting subsided very quickly, and the stomach could soon tolerate boiled milk thickened with flour. This change became necessary on account of the condition of the bowels, which now became as intolerant of the buttermilk as the stomach had been, the milk passing through immediately after ingestion. After the change of food no passage occurred for twenty-four hours.

Four successful cases will, of course, not establish the value of any remedy, but the recital of them may lead to further trial.

So far as I have observed, buttermilk does not coagulate in the stomach, as does new milk. This is, perhaps, its only advantage over the latter, but one of inestimable value, since the coagulation of new milk casein, so likely to occur, utterly forbids its use in many cases. In the "summer complaints" of children, for instance, buttermilk might be found eminently appropriate.

THE TREATMENT OF TAPEWORM.

Dr. James Tyson thus writes in the *Med. News*, March 7, 1885 :

There is, perhaps, no one condition which has brought more opprobrium upon the medical profession and more "grist to the mill" for quacks, than tapeworm, and to our humiliation it must be said that quacks do seem to have more success in getting rid of tapeworm than we do. There are, I think, two reasons why this is so. In the first place, it is certain that they do not use different remedies from those commonly in use by the profession, but they give larger doses. In the second place, they see a large number of cases and develop a sort of specialty, which, like all specialties, produces greater skill in treatment. When I say quacks, I mean more particularly advertisers and those who use secret remedies ; for in their treatment of tapeworm, they undoubtedly use remedies which experience shows to have been useful.

In order that a tapeworm may be successfully treated, it is necessary that it shall have a certain size ; so that if a large part of the worm has been brought away by medicine, it is useless to give anything more until the remaining part increases sufficiently in size.

There are half a dozen remedies for tapeworm, and they are all good. I think that the two best are probably the ethereal extract of male fern and

kooso. Some prefer the first of these, while others prefer the second. In my hands, kooso has been decidedly the most efficient—that is, having failed with everything else, and having succeeded with kooso, it has naturally become the remedy with which I always begin the treatment. It is the dried flowers and immature fruit of the Brayera anthelmintica, a tree native to Abyssinia. It is given in the form of a powder, and the only objection to it is its bulkiness. The dose is laid down as a half to one ounce of the powder in half a pint of water. I prefer to give the larger dose, for it is harmless, except in pregnancy, and I am sure that failures are often due to the smallness of the dose administered. Kooso is said to have produced miscarriage; therefore, it should not be given to pregnant women.

Patients require some preparation before any remedy is employed. I always tell them to eat nothing from noon of one day until the next morning, when one ounce of kooso in half a pint of water is directed to be taken. If at the end of six hours no movement of the bowels has taken place, a promptly acting aperient, as a dose of oil, compound jalap powder, or elaterium, is taken, but generally kooso requires no purgative after it. This usually brings away the worm entire. Of course, you are never certain that you have the entire worm until you find the head. At the same time, it does not follow because the head cannot be found, that you have failed to remove it, for it is very small, and may have been lost in the discharges. As I have said, in the tænia solium the head is about the size of a small pin's head; in the medio-canellata, it is somewhat larger, and in the bothriocephalus latus it is still larger. If the head has not been removed, you may be certain that in a certain length of time the worm will grow out again. This varies from ten to sixteen weeks.

Instead of kooso, the resin which it contains, called *koosin*, may be given; but I have had no experience with it. The dose is 20 to 40 grains enclosed in a wafer.

The next remedy in efficiency is the ethereal extract of the rhizome of Aspidum filix mas, whose active principle—an eleo-resin—is extracted by ether. The preparation of the patient is about the same as for kooso. The dose is half a fluid-drachm to a drachm. The larger dose should be given. It is a dark, thick liquid, bitter, slightly acrid and nauseous. Instead of the ethereal extract of male fern, the oil may be given in a gelatine capsule, which is the best vehicle for these unpleasant oils. Six or eight hour later, a dose of purgative medicine should be administered. An important point to be borne in mind is the varying quality of these drugs, and that they deteriorate with age.

The next remedy in order of efficiency is the bark of the root of the pomegranate. This has been given in the shape of a decoction, about two ounces to the pint, and the dose is a pint. Recently there has been introduced an alkaloid obtained from pomegranate, named pelletierine, in honor of the chemist, Pelletier. This is sold in a single dose, the price of which is, I believe, three dollars. When first introduced, it was vaunted as a "sure cure;" but the experience of practitioners in this city has not been uniform, and success has been by no means invariable. Very recently, however, I have known a case to have been successfully treated with pelleteriene after all else had failed, including large doses of turpentine, and including pelletierine itself. When successfully used, the dose of pelletierine was given after twenty-four hours' fasting and no preliminary purgation. In fifteen minutes afterwards, one drachm of compound jalap powder was taken. In an hour and fifteen minutes, the entire worm, including the head, was passed. When pelletierine was unsuccessfully used, it was preceded by a day and a half fasting, during which two doses of castor oil were taken.

Kamala, the hairs of the Rottlera tinctoria, is said to be very efficient in tapeworm, but I have had no experience with it. It is given in doses of from one to two drachms suspended in syrup, repeated in eight or ten hours if it do not purge. It is purgative, sometimes drastically so. It may also cause nausea and vomiting.

Another remedy, which is an excellent one in this affection, is oil of turpentine. At the same time, it is apt to produce such unpleasant symptoms that it would be the last which I should use. The dose is from an ounce to two ounces mixed with twice that amount of castor oil.

The last remedy which I shall mention is pumpkin-seed. This was used very commonly some twenty years ago. It was the remedy which I always used until frequent failures induced me to give it up. There are two ways in which it may be given. Two ounces of the seeds may be crushed in a mortar with water, then strained, and the emulsion taken fasting, the patient having dieted the previous day. A few hours later, a brisk purge should be taken. Or the seeds may be made into an electuary, which is almost as pleasant as sugar candy, and often is about as effectual.

I should place these different remedies in the order of their efficiency as follows: kooso, male fern, pomegranate and pelletierine, kamala, turpentine, and, lastly, pumpkin-seed. I am inclined, however, to give pelletierine an early trial, in consequence of its recent successful use in the manner referred to.

I have already stated that it is important to know the variety of worm present for the purposes of prognosis and treatment. The easiest of these worms to dislodge is the bothriocephalus latus, because it has neither the hooklets nor the rostellum of the other varieties. The next in ease of removal is the tænia medio-canellata, which, although it has the four suckers, lacks the hooklets which give the tænia solium its firm anchorage. Of all the forms

of tapeworm, the most difficult to dislodge is, therefore, the taenia solium, for it not only has the four suckers, but also the double row of hooklets. I believe, however, that if a more active course of treatment than is usually recommended be pursued, our efforts will be more successful.

TREATMENT OF CHRONIC ULCERS OF THE LEG.

Every physician and surgeon has his perplexities, in the practice of his profession. I have had many perplexities, but the management of old chronic ulcers, so frequently seen by the surgeon, has been to me one of the most difficult undertakings, until the last five years. Since that time I have adopted a course of treatment quite different from any laid down in our text-books. The plan adopted by me is that of sponge-grafting. The treatment is not original. I saw it mentioned in some medical journal about five years ago. Having had a case of sponge-grafting of a little different nature, it occured to me that sponge-grafting for the cure of ulcers, and especially of the leg, would be worthy of a trial. About ten years ago I was called to see a young man (a carpenter by trade), who had driven a two-inch chisel into the inner side of his knee, cutting the anastomotica magna artery. The haemorrhage was very great. Dr. A. A. Shobe, of Jerseyville, Ill., was called at the same time. Upon consultation we agreed to ligate the artery, but upon search for proper instruments for that purpose, we found we did not have them at our immediate command. The bleeding continuing profuse, I tore off a small piece of sponge, and grasping it in a pair of dressing forceps, dipped the sponge into a strong solution of tannic acid and crowded it into the cut. The bleeding stopped. I simply put on a common roller bandage, elevated the limb, and left the patient with instructions to keep quiet. I saw him every day for four days, and everything being all right, I did not remove the sponge.

Dr. Shobe, on the sixth day, insisted on the removal of the sponge. I made the effort at removal, but could only pinch off small pieces with the forceps, and in the pieces extracted I could plainly see the cause of the sponge adhering so firmly—the granulations had sprung up and insinuated themselves into the interstices of the sponge, and, having locked themselves fast into the sponge, when I would pull off a piece I would break off the granulations and cause bleeding. I saw the best thing to be done was to let it alone. My patient was out in about fourteen days on crutches, and in about six weeks was entirely well. The sponge was removed only by absorption.

Now I will describe my treatment for ulcers. The size of the ulcer makes no difference. I first cleanse the ulcer with castile soap suds, then dry it off, and, having previously prepared my sponge, I place it on the ulcer. The next thing to be done is to place over the sponge a piece of lead foil sufficiently large to cover the sponge, then, over that, a rubber bandage to hold the sponge and foil down in such a manner as to make equal pressure, but not so tight at the same time as to interfere with the circulation. The bandage and lead-foil must be removed twice a day, for the purpose of dressing the ulcer, being very careful not to lift the sponge out of the ulcer. I generally use for washing and disinfecting, the ulcer and sponge the following: Equal parts of distilled water, glycerine and listerine, or the following: Aquae dest., glycerini, aa ʒ ij; acidi carbolici, 95 per cent., ʒ ij. M. I use either of three by means of a small syringe. After dressing the sponge and ulcer in this way, I replace the foil and bandage as before. In a very few days you find the sponge will not fall off so very easily, for the granulations having sprung up and locked themselves into the interstices of the sponge, hold the sponge, fast; at the same time absorption of the sponge is going on. So by the time the ulcer is healed the sponge is absorbed. This gives the doctor no trouble, and the patient can attend to it himself. Rest, at the same time is a very great desideratum, though I have cured many cases where the patient continued to follow his daily avocation. The preparation of the sponge is of great importance. I select a very fine sponge (a surgeon's sponge), wash it clean in distilled water, then immerse it in nitric acid, c. p., for the purpose of cleansing it of all lime or other earthy matter that may be in it. I rinse it through a half-dozen washings of water to get the acid out as nearly as possible; then I immerse it in carbolized water, when it is ready for use. The sponge must be cut a little larger than the ulcer, and very thin. The sponge acts at the same time as a protection to the granulations, and keeps them from being destroyed.—*Dr. Du Hadway*, in the *Weekly Med. Rev.*

SIMULO IN EPILEPSY.

In the first number of *El Boletin Medico*, published at Trujillo, Peru, Dr. Larreay Quezada recommends the treatment of epilepsy by an Indian remedy "simulo," which is the fruit of *Capparis Coriacea*, a plant indigenous in Peru. *Melocharn*, a conserve made from another plant belonging to the same natural order, is also used in epilepsy. Of the powdered simulo, 45 grammes are mixed with 500 grammes of the sweet sacramental wine, and of this a wineglassful is to be taken night and morning. In his own case, this treatment was most successful. As a boy, aged 13, he had fourteen epileptic attacks, preceded by a distinct aura, but under this treatment the fits left him. Since he has been in practice he has employed simulo extensively in epilepsy, hysteria, and other nervous diseases.

BICHLORIDE OF MERCURY IN DIPHTHERIA AND CROUP.

Dr. William M. Thalon contributes two articles on this subject to the *N. Y. Med. Jour.* Dr. Pepper, of this city, is a great advocate of this treatment. He uses it in large doses, with the following rules to guide him: If the false membrane is increasing, he increases the drug; if it is stationary, he maintains the same dose; if it is decreasing, he diminishes the remedy, and if the membrane has disappeared, he at once stops the bichloride.

He has found it convenient to have two standard formulas, according as he wishes to combine iron with the mercury or not. He generally writes for a three-ounce mixture, with half a grain of the bichloride, so that each teaspoonful contains about one-fortieth of a grain. The following are his prescription models:

Formula 1.—℞. Hydrargyr. bichlor., gr. ss; tinct. ferri. chlor., f. ʒ iij; glycerin., f. ʒ ss; aquæ, q. s. ad. f. ℥ iij. M. Sig. f. ʒ j. as directed, in water. Formula 2.—℞. Hydrargyr. bichlor., gr. ss; vin pepsin., elixir bismuthi, aa ʒ iss. M. Sig. f. ʒ j, as directed, in water.

The second formula is the pleasantest way of prescribing the remedy, and it is the one used by Dr. Pepper.

Practically, he now generally begins with the second formula, and, when convalescence has commenced, resorts to No. 1 to get the benefit of the iron.

He does not attempt to explain the action of the bichloride; but bases his claim that it will give better results than other treatment know at present entirely on clinical evidence. An important point is that the drug should be well diluted, whereby its irritating properties are avoided.—*Med. & Surg. Reporter.*

ICE TO THE SPINE IN OBSTINATE VOMITING.

Dr. Wm. L. Davies, in the *Mississippi Valley Med. Mo.*, April 10, 1885, says: I was called to a patient, æt. forty-seven, the mother of nine children, suffering from a severe typhoid fever with intractable vomiting, which had persisted for several days. All of the ordinary means failed to control the condition of the stomach, and even pellets of ice were instantly rejected. High temperature characterized the fever, and every effort was made for its reduction, believing that it had much to do with the production of the nausea and vomiting, but the latter prevented the medication indicated for this purpose.

Menstruation had been normal for some time, except the epoch just preceding the attack of fever, which, although the flow made its appearance, was but limited in quantity. From the age of the patient and the number of children she had borne, I was inclined to the belief that the climacteric was a factor in the gastric derangement. Thinking, therefore, that the vomiting might depend upon reflex disturbance of uterine origin, or ill-defined spinal derangement, I applied ice in considerable quantity to the lowest part of the spine. The vomiting ceased instantly, and a profuse perspiration followed. The use of the ice was persisted in only as the indications appeared to demand it. Taking the hint from this, however, cool sponging was instituted with marked benefit, so that the use of the extreme cold to the spine was only of occasional necessity. With the exception of anodyne injections to produce rest at night, little other treatment was ordered. The subsequent progress of the case was satisfactory, and the ultimate recovery complete in about the average time.

The history of the case since her getting up has not confirmed my conclusions in regard to the menopause.

DESQUAMATION IN SCARLET FEVER.

Mr. George Smith states in a note in the *Bristol Medico-Chirurgical Journal*, that he has for several years been in the habit of having his patients sponged over the whole surface of their bodies twice a day—commencing, as a rule, about a week from the appearance of the eruption, and continuing the process until desquamation is complete—with a mixture of one ounce of oatmeal to one pint of boiling water. The solution must be made fresh every day, and used tepid, or at such a temperature as may be comfortably borne by the back of the finger. His reason for using this particular form of scalded, not boiled, oatmeal, is that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing their removal, from one sponging to another, without the ordinary risk of infecting either atmosphere or clothes, and greatly lessening the risk of spreading the disease. Secondly, this same gluten fills up the cracks of the new skin and protects it from cold, as, patch after patch, it becomes bare, and thus greatly lessens the risk of the dropsy which often follows this disease.

HAZELINE IN MENORRHAGIA.

In the *Practitioner*, Aug., 1885, p. 141, Mr. M. Chute describes a valuable remedy for menorrhagia, which is a very frequent ailment in women in Cape Colony. Two drachms of hazeline, given twice or thrice a day, will act so quickly that it is not necessary to anticipate the flow; but when menstruation, after it has lasted the ordinary time, is not closing naturally, hazeline, given as above, will effectually restrain it, and after hæmorrhage has ceased there is no advantage in continuing the drug. Another good result produced by hazeline is, that it relieves the pain of dysmenorrhœa in a very quick and marked manner.—*Phil. Med. and Surg. Rep.*

THE TREATMENT OF CHRONIC BRIGHT'S DISEASE.

Dr. Dana, of Portland, Me., concludes a carefully-prepared paper (Boston *Medical and Surgical Journal*) with the following practical suggestions:

1. One of the most important indications is to avert or reduce hyperemia and inflammation of the kidneys. With this end in view a uniform and sufficient warmth of the surface of the body should be maintained. In this disease, and also where predisposition to it exists, when the large amount of blood normally present in the cutaneous capillaries is reduced by chilliness of the surface, a corresponding hyperemia of the renal capillaries is very likely to occur. In a case recently under my observation, of the typical parenchymatous nephritis form, the man owned and steadily worked upon a farm located upon a narrow neck of land, projecting out from the Maine coast into the sea, and commonly swept by cold and damp winds, often sudden and severe. Frequently, when covered with profuse perspiration, his skin would become chilled with the wind, and he had himself noticed an apparent connection between these experiences and the development of his trouble. A moderately warm and equable climate is a great advantage. A sufferer from this disease, who is so favorably circumstanced as to be able to avail himself of different climates for different seasons of the year, so that he can have the benefit of free out-of-door life all the year round without risk of becoming chilled, has his chances of prolonged and comparatively comfortable life thereby greatly increased. Woolen undergarments should be worn thick enough to insure warmth without inducing sweating. A flannel night-gown is advisable in cold weather. In acute exacerbations of the disease, attended with increased heat, the patient should be kept in bed, between blankets, for days, or weeks. The importance of maintaining a uniform warmth of skin in this affection does not seem to be fully appreciated by the average practitioner. Local applications to the lumbar regions are useful, such as leeching or cupping, followed by warm fomentations, especially when a sense of heat and heaviness has arisen, with scanty secretion of urine. I have found advantage in large packs. Several thicknesses of towels may be used, large enough to thoroughly envelop the small of the back and come round somewhat freely upon the abdomen. These should be rung out in tepid water, covered with oiled silk or impervious paper, and bound firmly on with a flannel swathe. A small blanket, folded once, may then be wrapped and firmly pinned round the body below the waist. These, having been worn for the night, are removed in the morning, the skin is sponged with cold water, and rubbed dry, and a flannel swathe is worn for the day. Mild diluent diuretics are sometimes called for.

2. A second indication is to unload the obstructed uriniferous tubules of their accumulations. The thrown-off and altered epithelial cells, transuded fibrines, extravasated corpuscles, and fatty débris, sometimes in the form of casts, frequently occlude the tubules, and add to the existing disability of the kidneys. Simple diluents and mild diuretics are then needed, such as cream-of-tartar water, and pure natural waters like the Poland spring water. They should be drunk freely, and, by preference, on an empty stomach, so as to be quickly absorbed and passed off through the kidneys.

3. A third indication is to build up the blood and promote nutrition. Whether, or not, the blood is ever the starting point of the morbid process in the system it is certainly true that the peculiar anemic look of the patient is often the first thing that arouses in the mind of the physician a suspicion of the true nature of the disease, while, in the advanced stage, the blood is constantly found impoverished and depraved to the last degree, and utterly unfit to maintain healthy nutrition. Of the large class of building-up remedies I will mention, as specially useful, the mistura ferri et ammonii acetatis, cod-liver oil, and malt. Judicious and persistent use must be made of this class of remedies.

4. A fourth indication is to improve the condition of the nerve centers. The importance of this indication is specially plain in the cirrhotic form of the disease occurring in painters and others who have been exposed to poisoning by lead. Here the iodide of potassium, the dose of ten to twenty grains, conveniently administered in half a tumbler ful of Vichy water, may be given three times a day for long periods of time, with markedly good results. The same method is applicable to cases of syphilitic origin, or occurring in systems specifically infected. In such cases the corrosive chloride of mercury in small doses may be substituted for the iodide of potassium for the period of a few weeks, from time to time, with advantage. In some of the cirrhotic cases of unknown origin, I have found great benefit from the use of the chloride of gold and sodium, as suggested by Bartholow, in the average dose of the twelfth of a grain in pill form, after each meal. I have seen periods of marked improvement of general condition and special relief of distressing nervous symptoms follow its use. Arsenic, in small doses, and the hypophosphites are sometimes useful.

5. The fifth indication is to promote the elimination of urea from the blood. In order to appreciate the importance of this indication we have only to remember that uremia constitutes the chief danger of the disease, a fatal apoplectic seizure being occasionally its first revelation; or, to call to mind the fearful sufferings of the paroxysms of uremic dyspnea, uremic headaches, and uremic convulsions. Here we must mainly rely upon vicarious evacuations by the skin and bowels, and I believe that sudorifics are the most valuable class of remedies. Profuse diaphoresis may be induced by hot air and hot vapor-baths, and by

the internal administration of various drugs, of which jaborandi is by far the most valuable as an eliminator of urea from the blood. But the means which I have found at once the most efficacious and convenient is the hypodermic injection of pilocarpine. I have resorted to this method many times with the best results. The dose used is generally a quarter of a grain, the patient being in bed between blankets, and I usually find the entire surface of the body covered with a profuse sweat within the space of five minutes. When the process of diaphoresis is over, the skin may be wiped dry, and fresh clothes put on. The amount of the secretion is enormous, and the elimination of urea has been shown to be large. Great relief of the uremic symptoms is often obtained by the daily use of this method for a series of weeks. I have seen, in a case still fresh in my mind, headache, dizziness, dyspnea, unrest, marked impairment of vision, and heart irritability so largely and rapidly subside as to raise a doubt in the minds of friends, and even of the attending physician, as to the correctness of a diagnosis, unhappily confirmed by the later history of the case, and at last by the autopsy. I recommend the plan to my professional brethren, cautioning them to be sure to get an article of good quality.

6. A sixth indication is to evacuate dropsical accumulations. For this purpose mechanical methods are sometimes useful, such as acupuncture of the legs, prepuce, labia, etc., or a short incision over one of the malleoli. Tapping of the abdomen is generally to be avoided in renal dropsy. Erysipelas is specially liable to follow operative methods in this form of dropsy. Hydragogue cathartics, which are often so well borne, and so satisfactory in results in cardiac dropsy, are neither so safe nor so useful in the dropsy of Bright's disease. Sometimes, however, resort must be had to elaterium in suitable doses and combinations. Sometimes making temporary use of the remaining powers of the kidneys, diuretics may be given, especially the infusion of digitalis with the iodide of potassium or cream of tartar. But I believe that in this disease, not only for the elimination of urea but also for the evacuation of dropsical accumulations, the hypodermic use of pilocarpine is not only one of the safest, but also one of the most effective measures at our command. It is a good plan to alternate the various methods laying the burden of vicarious service alternately upon the different organs. The Basham's mixture, above mentioned, besides being useful as a blood estorer, often acts as a gentle tonic-diuretic.

7. A seventh indication is to sustain the heart. It has been shown by Johnston and others that in the inflammatory forms of the disease the walls of the small arteries and capillaries are very constantly thickened, and their caliber diminished. Indeed, it has even been proposed to call the disease an "arteriocapillary fibrosis." Associated with this vascular affection, if not indeed caused by it, is found hypertrophy of the left ventricle of the heart, which very generally at last undergoes fatty degeneration and dilatation. It is, therefore, a matter of great importance to save the heart, if possible, from all strain. No over-exertion of the body or mind should be allowed. Excitements of all kinds should be avoided, and tranquility of mind should be promoted. Digitalis and strychnine are perhaps the two drugs most used, from time to time, to strengthen the heart's action.

8. My last indication is to palliate the suffering of this distressing disease. The methods for this are in large measure involved, and have been mentioned under other heads. As much of the distress doubtless arises from uremia, so the most lasting relief is that which comes from the elimination of the urea. I will mention a few items here. In the fits of dyspnea prompt relief is sometimes obtained from the hypodermic injection of the quarter of a grain of morphia with the hundred and twentieth of a grain of atropine. The nitrite of amyl quickly affords relief in some cases, a few drops being put upon a handkerchief and held to the nose. The same use of morphine and atropine is often useful in convulsions, restlessness, and general nervous disturbance of the advanced stages of the disease. For the headache and dizziness a scruple of bromide of sodium in a teaspoonful of syrup of lactophosphate of calcium may be given three times a day, and for the insomnia thirty grains of bromide of potassium, with seven or eight grains of chloral at bedtime. For the uremic coma I have found the hypodermic use of pilocarpine by far the most effective remedy.

For diet, as a rule, any articles of plain and simply cooked food may be allowed which the appetite inclines to and the stomach is able easily to dispose of. In some cases advantage is found in restricted diet of milk, skim-milk or butter-milk.

Finally, while chronic Bright's disease is, at least, very generally fatal, yet the fatal issue is not necessarily a speedy one, and years of comparative comfort and effectiveness may sometimes be added to valuable lives by constant watching and judicious treatment.

GONORRHŒA EASILY CURED.

Dr. Z. T. Dellenbaugh (*Coll. and Clin. Record*): In cases of acute gonorrhœa I have, for eight or ten years, used carbonate of lithia to alkalinize the urine; and find the five-grain compressed tablets, one taken three times daily, very convenient, fulfilling every indication better than any other salt. I now rarely find it necessary to give any other remedy internally.

Should the case fail to respond to the following injection, and not show marked improvement in two or three days, two sandal wood oil capsules may be given three times daily for three or four days. The injection I have used in acute and sub-acute gonorrhœa for more than a year, with the most gratifying results, especially to the patients, who have recovered in from two to seven

days, and paid me from one to three visits, is the following: ℞ Resorcin, ʒ j; acid. boracic, gr. xx; zinci acetatis, gr. ¼-½; aqua distillat., f ʒ iv. M. Of this solution two teaspoonfuls are injected three times daily. The germicides, resorcine and boracic acid, are so slightly astringent that it requires the additional zinc salt to restore capillary tonicity. This injection is quite, or nearly, painless.

In the treatment of the later stage of sub acute and chronic gonorrhœa, without stricture or granuloma as a complicating factor, I have had the happiest results follow the use of the following injection: ℞ Hydrargyri chloridi corrosivi, gr. ¼—ss; zinci chloridi, gr. ss j; aqua distillat. ℥viij. M. Sig.—A tablespoonful to be injected well down the urethra, three times daily.

Corrosive sublimate injections are by no means a recent addition to the list. The rationale of their use, however, is recent. As in this injection for acute cases, the germicidal constituent must be so sparingly used (otherwise it produces great pain and reactive inflammation), that I find it very advisable to combine a more astringent salt, and the chloride of zinc is the one I have selected, for obvious reasons. Without doubt, a mild injection of corrosive sublimate is destined to be *the* injection for sub-acute and chronic gonorrhœa.—*American Medical Digest.*

TURPENTINE IN SKIN DISEASES.

The internal administration of this drug in skin diseases has not been very often recommended, hence it is well that we should know that Dr. H. Radcliffe Crocker (*Practitioner*, March, 1885,) considers that in the turpentines we have remedies that, while not "perfect cures," yet reduce the hyperæmia and place the patient so far on the way to recovery that a short supplementary local treatment easily removes the remains of the lesion.

He has used it in psoriasis, and in eczema. The dose of the oil is from fifteen to thirty minims in emulsion of acacia thrice daily.

For eczema, he restricts its use to those cases in which no defect in the general health can be detected—a small proportion of cases undoubtedly compared to psoriasis, which Hebra called "a disease of the healthy"—but it is just these uncomplicated cases that puzzle us as to what line of treatment is most likely to prove successful, and he thinks turpentine will help us out of the difficulty. With regard to other diseases of the skin, the evidence he can offer at present is only fragmentary, but that is favorable so far as it goes. In a case of pityriasis rubra, Chian turpentine was given in five, increasing to fifteen grain doses, three times a day, and the skin distinctly improved; but the patient, as so often happens in these cases, became so adynamic, not from the drug, but from the natural course of the disease, that other treatment had to be resorted to. Turpentine is a well-known remedy for purpura, but he has no new facts to offer on this point.

The cases in which turpentine is contra-indicated are, in his opinion, the following: children under five years old; all who have unsound kidneys, or irritable bladders; most cases in which dyspepsia is present, though in some instances it can be tolerated even then; and gouty subjects, whose powers of elimination are seldom good.—*Phil. Med. and Surg. Reporter.*

OPIUM IN HÆMOPTYSIS.

A writer in the *Physician and Surgeon* says: "Although a multitude of drugs are recommended, and not a few almost regarded as specifics, it must be admitted that the profession has at command but a few preparations that have unquestioned influence to control pulmonary bleeding. Ergotine and the fluid extract of ergot have been mentioned; oil of turpentine given by mouth or rectum exhibits positive action in hemoptysis of phthisis. But it cannot be too forcibly urged that the most important condition requiring treatment is the terror manifested by the patient, so alarming and distressing to the friends, which in turn tends to further alarm the patient. The administration of opium in some of its forms is clearly indicated to calm the excited brain and reduce the throbbing heart. Give it hypodermically, that its physical effects may be quickly produced. The result is magical. The patient's actions and countenance are speedily calmed, the bleeding stops, the much-needed refreshing sleep is obtained, and the over-estimated danger is averted."

TREATMENT OF ANGINA PECTORIS BY THE IODIDE OF SODIUM.

Angina pectoris, since the days of Gintrac and Lancereaux, has been considered as a cardiac neurosis. Although in many cases a diseased condition of the coronary arteries and the aorta has been found, still the symptoms have been ascribed to a nerve disturbance dependent more or less on the innervation of the heart muscle or upon some degenerative change of the nerve fibres. M. Henry Huchard, from a study of twenty-five post-mortem examinations made at "Hopital Vichart," objects to this view and ascribes the symptoms directly to degenerative changes with obstruction of the coronary arteries. He claims that true angina pectoris is the result of a disease of the arteries and not of the nervous system.

In accordance with this theory he advises remedies which have an effect upon the arterial system. The iodide of sodium is especially recommended given in doses of sixteen to thirty grains daily. He continues this medication during months, and even years, and claims to have given complete relief and to have produced a cure of this dreaded disease in many cases. He thinks that the iodide of sodium probably acts by lower-

ing the blood tension, relieving the walls of the artery and favoring the disappearance of the pathologic exudation. For the relief of the paroxysm he recommends the inhalation of the nitrite of amyl in four to six drop doses.

Although true angina pectoris had been assumed to be a neurosis, the remedies which have been most successfully employed have been those acting upon the arterial system. Occurring as it does at the ages when degenerative changes in the arteries are found and in subjects of such degeneration, it would seem that the theory advanced by Huchard should be carefully considered. That it is generally accompanied by high arterial tension has been already recognized, and the drugs have been most successfully used which reduced this tension. Dr. Lauder Brunton has long since recommended the nitrite of amyl in reducing blood pressure, and we are indebted to Dr. Murrell for our knowledge of the value of nitro-glycerine as a remedy producing the same result. Both remedies have been successfully employed in relieving attacks of angina pectoris, but neither has been able to effect a permanent cure.

That the iodides from their well-known action of lowering the blood-pressure and at the same time favoring the disappearance of pathological exudations may exert a healthy action in the earlier stages cannot be denied, but in cases connected with well developed atheroma more evidence is needed before it can be positively accepted.—*St. Louis Courier of Med.*

THE TREATMENT OF CORPULENCE ON PHYSIOLOGICAL PRINCIPLES.

As analyzed by the Birmingham *Medical Review* (*Detroit Lancet*) Ebstein, in his work on corpulence, gives some practical points for the reduction of obesity.

According to him, fattening is strictly analogous to the fattening of cattle, and depends on overfeeding. He, however, disputes the current view that fat makes fat; on the contrary, he thinks fatty food protects the albumen and prevents its forming fat. His plan of treatment, therefore, consists in moderating the quantity of food, and, while cutting off all vegetable carbo-hydrates, sugar, starch, etc., allowing a moderate quantity of fat, two or three ounces daily, to be taken. He also suggests that the diet should be monotonous, greasy, and succulent, so as to cause satiety rapidly. He disallows beer, but permits light wines.

The plan advocated appears rational, and is free from the objection of Banting's method, which is too much like starvation. The following is the diet used successfully by Ebstein in one of his cases:

Breakfast.—One large cup of black tea—about half a pint—without sugar; two ounces of white bread or brown bread, toasted, with plenty of butter.

Dinner.—Soup, often with marrow, from four to six and one-half ounces of roast or boiled meat, vegetables in moderation, leguminous preferably, and cabbages. Turnips were almost, and potatoes altogether, excluded. After dinner a little fresh fruit. For second course, a salad, or stewed fruit without sugar. Two or three glasses of light wine, and immediately after dinner a large cup of tea, without milk or sugar.

Supper.—A large cup of black tea, as before. An egg, a little fat roast meat, or both, or some ham with its fat, bologna sausage, bread well buttered, occasionally a small quantity of cheese, and some fresh fruit.

On this diet the patient lost twenty pounds in six months.

Ebstein insists on the necessity of always keeping to the restricted diet if the tendency to corpulence is to be successfully combated.

GLYCERINE IN GASTRIC DISTURBANCES.

BY C. C. P. SILVA, M.D.

Glycerine, by virtue of its soothing effects on the internal integument, and also by its anti-acid and antiseptic properties, is an agent of the highest value in the therapeutics of some gastric affections.

When, through some cause, either owing to the digestive apparatus, or to the ingesta, the digestion becomes painful, tardy, laborious, and imperfect, there is always present in the cavity of the stomach or that of the intestines, a more or less developed fermentation with the necessary consequence, accumulation of gas, acid or otherwise.

This, which takes place in the adult very frequently, owing to the bad habit, principally among business men, to admit into the stomach aliments improperly masticated, happens with the infant still oftener, because of greediness on their part, or in consequence of inadequate alimentation or faulty hygienical surroundings. In glycerine we find a very useful medicament to inhibit fermentation, generation of gas and also to soothe the irritability of the gastro-intestinal mucous surfaces. This, of course, is only a palliative treatment, but not in the least to be neglected, for it relieves immense suffering, meanwhile, we correct the primitive cause of the dyspeptic or apectic disturbance, by slow and perfect mastication of all ingesta, discarding of any aliment which experience (personal or otherwise) shows to disagree, regularity in taking meals and adaptability in its quantity and quality, to the requirements of the organism, in general, and of the stomach, in particular. The observance of sound hygienical precepts is not a less important factor of success. The dose of glycerine, for adults, is a teaspoonful, in water, before or after meals, and for children, from ten drops to half a teaspoonful, according to age.

THE THERAPEUTIC VALUE OF ARSENIC IN ANÆMIA AND ATROPHIC CONDITIONS.

Dr. Samuel Wilkes, in the *Lancet*, writes strongly in favor of arsenic in many diseases where skepticism as to its use on the part of a large portion of the profession has generally prevailed. There can be no doubt that many of the cutaneous affections cured by arsenic have a gouty origin, and therefore it is not surprising that the same remedy has a great power in preventing attacks of gout. Then this gouty class of persons are often neuralgic, and it may be in them especially that arsenic is the best nervine remedy. He has found it amongst the most efficacious medicines, and in some cases the only remedy. Thus, before the introduction of nitrite of amyl and glonoine for angina pectoris, he relied mainly on arsenic, and in some cases kept off attacks for weeks where they had previously occurred almost daily. But the most remarkable effects of this remedy are seen in anæmia and various forms of cachexia and atrophy. One case which he cites was a lady about forty years of age who was pronounced to be the subject of idiopathic anæmia. Her bloodless and feeble condition compelled her to keep her bed, and it was never believed that she would rise from it again. Arsenic was used, she soon began to improve, and in a few weeks was able to visit her doctor at his house. Her husband was not surprised at the action of the remedy, for, as he said, if he had a horse which was not "thrifty" he gave it arsenic, rendering it again plump and glossy. Another case of the so-called pernicious anæmia was in a gentleman who had gradually grown anæmic and breathless,so as to be unable to leave his house, and he walked with much difficulty. He took five drops of liquor arsenicalis, and in a month he was comparatively well. In most of the cases where arsenic has succeeded, iron had previously failed. It is,however, in wasting and general cachexia that Dr. Wilkes has been the most pleased with its action. He details several cases where there were evidences of extreme wasting and debility, attributable to no special disease, and where arsenic effected cures.

He has never given very large doses, generally four or five drops of the liquors arsenicalis three times a day, or a little more of the soda preparation; nor has he observed any injurious effects from its long use, although,as is known, it becomes absorbed into the system, the urine showing its presence many weeks after its administration has ceased.

An editorial on this article, in the same number of the *Lancet*, considers Dr. Wilkes' testimony as of great value, as coming from one who is far too much imbued with scientific caution to lavish undeserved credit on any pharmacopœial preparation. The testimony of Dr. Wilkes on its efficacy in idiopathic anæmia is borne out by the experience of many physicians; among the most recent being Dr. Warfinge, of Stockholm, who reported several cases of remarkably rapid arrest of the downward progress of the disease, and even of recovery, under the use of arsenic. All such cases should, however, be subjected to prolonged supervision, as it is notorious that relapses are prone to occur. The same remedy has been also successfully employed in an even more definite cachexia—viz.: Hodgkins' disease, where the administration of arsenic has been supplemented by its injection into the hyperplastic lymphatic glands, with, according to Winiwarter, astonishing results

BELLADONNA INJECTION FOR GONORRHŒA.

Some thirteen years ago, an officer on board one of the vessels of the Indus Steam Flotilla consulted me for a bad gonorrhœa, with intense pain on micturition, and intolerable chordee at night. The case was urgent, and I ordered an injection composed of seven ounces of water, an ounce of mucilage acacia, twenty grains extract of belladonna, and twenty grains of sulphate zinc, a teaspoonful to be injected immediately before and after micturating, and a similar amount the last thing at night; great care to be used in passing the injection fully down as far as the pain is most intense. An ointment of spermaceti and mercurial ointment, four drachms each, and ten grains extract belladonna, ten grains powdered opium, as a paste to be smeared along the perineum and around the crura penis at night. Patient left next morning, having had no chordee that night, and the pain of micturition disappeared by using the injection. Within a week there was complete cure. From that time I have had numerous gonorrhœal cases of every type and stage, and without exception with unfailing success. Not long since a shop assistant presented himself with a bad gonorrhœa, high fever, inflamed testicle and chordee at night. With the application of the belladonna and opium ointment the chordee did not appear, and in four days after using the injection the running ceased, but after the first application the pain and running were much lessened. A suspensory bandage was worn, and with the daily use of the mercurial and belladonna and opium ointment the patient was quite well in three weeks. Patients have always started that it is the injection, and not the ointment, which stopped the chordee. I have tried the anodyne treatment in various classes of people,from the dissipated paupers of the Eastern bazaars to the well fed *roue* in the West: in the acute and in the chronic and gleety stages; in first attacks and in those making one of a series; and in cases complicated with inflamed testicles and chordee; and I have no hesitation in saying that I have not witnessed anything to contra-indicate it nor to mitigate its success.—*Medical Press.*

BOROGLYCERIDE IN PSORIASIS.

Dr. Chas. Roberts in an irritable and obstinate case of psoriasis, used boroglyceride locally with very gratifying results,and has since used it in other cases with the same effect.—*Brit. Med. Journal.*

IODOFORM COLLODION IN NEURALGIAS.

Dr. William Browning, of Brooklyn, in the October number of *The American Journal of the Medical Sciences*, gives his experience with this remedy for external application, together with notes on the preparation itself, and a brief study of its action. The strength usually employed is one part of iodoform to fifteen of collodion. A half ounce is usually sufficient for any ordinary single application. Dr. Browning has found it most effective when painted on in very thick layers, which may be conveniently done with the usual camel's hair brush. As soon as one coating becomes a little firm another is applied, and so on until it appears to have an average thickness of half a millimetre. In the neuralgic cases as a cure, when effected, was usually accomplished with one or two applications.

The class of troubles found most amenable to this treatment was narrowly localized neuralgias, especially when corresponding to some particular nerve and not dependent on any demonstrable lesion. In fact, if a neuralgia, or what is thought to be one, proves intractable to this means, we should doubt its being a purely functional affection, and look carefully for some tangible cause. It has thus a certain diagnostic, as well as a therapeutic, value. Several times its complete or partial failure has led to a more searching and successful examination. Even in such cases much temporary relief is often afforded.

Supraorbital neuralgias, even of malarial origin, particularly if the miasmatic infection dates back some time, seems quite amenable to this treatment. Of course it is not recommended as a substitute for quinine here, but only as an adjuvant where the latter fails or acts too slowly.

THE SURGICAL TREATMENT OF GALL STONES.

Mr. Lawson Tait thus writes in the *Lancet*, September 5, 1885:

I have now performed the operation sixteen times, with uniform success, whilst the variations from the proceeding I am about to describe have been disastrous to the extent, in the hands of others of between fifty and sixty per cent.

Having felt the position of the hepatic notch, I make an incision from the margin of the ribs over it directly, or almost directly, downwards, cutting carefully through the various textures until I reach the peritoneum. This is carefully seized by two pairs of forceps and pulled backwards, an opening having been made between the two pairs of forceps large enough to introduce my forefinger. With this I search for the gall-bladder; and sometimes I have experienced considerable difficulty in finding it. Generally speaking, the stones can be felt in the bladder before it is opened. In two cases out of the sixteen I have not found any gall-stones; in one case a mistake had been made, and in the other the disease was in all probability malignant. Having found the gall-bladder, I cautiously bring its fundus towards the wound and seize it by a pair of forceps. If it is distended, it is first of all tapped and emptied; if it is not distended, or if it had been emptied, I lay it open by scissors or forceps to an extent sufficient to get a finger in; the edges of the wound in it are then seized by forceps, and any bleeding points secured. My finger then explores the bladder, and by means of forceps or scoop all the stones within reach are removed. A continuous suture is then applied so as to accurately close the peritoneum by uniting the edges of the wound of the abdominal wall to the edges of the wound of the gall-bladder, the two peritoneal surfaces being carefully adapted to each other. An India-rubber drainage-tube is then placed in the wound, and this is kept in for six or seven days, until it is possible to remove the stitches. If the stiches are removed along with the drainage-tube, the wound speedily heals; and if all the stones have been removed, the patient is already cured. If the wound reopens and bile discharges, or mucus from the gall-bladder, the remaining stone which occludes the passage must be dealt with, either by crushing from the outside of the duct or in some other way, as circumstances or the ingenuity of the operator may suggest. I certainly vouch for this that, so far as my cases have gone, it is not known that they have any tendency to the reproduction of the gall stones. Certainly they have not given any indication of it so far. I would point out that even if this did happen, an incision through the skin, probably only half an inch deep over the site of the old scar, would reach the gall-bladder without opening the peritoneum at all, and any reaccumulation of gall stones might be removed without the sllghtest difficulty or danger. I need not point out that in the event of the operation being performed which is suggested—namely, cholecystectomy—after an accumulation occurred in a case of numerous gall-stones, as actually did occur to myself where a small gall-stone lodged beyond the junction of the hepatic and cystic ducts, the operation in which the gall-bladder was removed would be, of necessity, fatal, because all the secretion of bile would find its way into the peritoneum. The detailed results of this operation of cholecystectomy have not been published, and what I know of them is only by hearsay, but I have a strong suspicion that the deaths in two of the cases are to be attributed absolutely to this cause. At any rate, the mortality of cholecystectomy is fifty per cent.; the mortality of cholecystotomy has not yet appeared.

USEFUL INHALANT.

At the Throat Hospital, London, the following is much used as an inhalant: Oil of Scotch pine (fir), 2 fluid drachms; carbonate of magnesia, 1 drachm; water, sufficient to make 3 ounces. A teaspoonful is put in 1 pint of water at 150° F., and used at each inhalation.

THE USE OF CARBONATE OF AMMONIA IN CEREBRAL HEMORRHAGE, THROMBOSIS, AND EMBOLISM.

Dr. R. C. Van Wyck thus concludes an article in *Gaillard's Medical Journal* for August:

The advantages I claim for the carbonates of ammonia in the treatment of cerebral hemorrhage, thrombosis, and embolism are as follows:

1. As a diffusible stimulant to the general circulation, relieving the anæmia which is present in the brain, increasing the cutaneous circulation, and inducing perspiration—relieving in this way intercranial pressure.

2. By its direct action in dissolving the clot. The only agents which possess this property are the alkalies, and the most effective of these is ammonia.

3. In œdema and congestion of the lungs, so often seen in apoplexy, the use of this salt will often relieve the existing condition, partly by its stimulating action on the terminal capillaries, and also by its expectorant action on the bronchomucous membrane.

4. By keeping up the alkalinity of the blood, and preventing further thrombosis.

I do not claim this drug as a specific, but only an auxiliary to other remedies. In the treatment of a case of cerebral hemorrhage, the following would seem to me the order of treatment:

1. The prodromal symptoms which threaten an attack of apoplexy, by prompt venesection and catharsis.

2. To relieve the period of reaction after paralysis has taken place by arterial sedatives, preferably aconite.

3. To remove the exudation and all retrograde changes in the clot, anæmia, pulmonary congestion, and further thrombosis, by the free use of carbonate of ammonia.

4. To support the system by nourishing yet unstimulating diet, and by the use of medicines which nourish the brain tissue, such as syr. lactophosphate of lime, cod-liver oil, and the phosphide of zinc.

5. To increase the muscular development by massage-frictions, electricity, and strychnia.

The carbonate of ammonia should never be given in cerebral hemorrhage until the period of reaction has fully taken place, say from ten days to two weeks.

It should then be given continually for at least a month or more, or until the retrograde changes in the clot are accomplished.

In thrombosis and embolism if the diagnosis can be clearly made it should be given at once.

The dose used was 5 grs. three times daily in 3 ss. of the solution liquor ammoniæ acetatis.

There is one class of cases in which the carbonate of ammonia has not acted well in my hands, viz., cerebral hemorrhage associated with interstitial nephritis and hepatitis. In these cases I have had good results from the phosphate of sodium, 20 to 30 grs. three times daily, in the infusion of dandelion given after meals, and small doses of corrosive sublimate, 1-24 gr. three times daily before each meal. I have sometimes combined it in a pill with digitalis and squill.

MEMBRANOUS CROUP; DIPHTHERITIC CROUP; TRUE CROUP.

The April number of *The American Journal of the Medical Sciences* contains an elaborate clinical study of true croup, from the pen of Dr. J. Lewis Smith, of New York. He fully considers the etiology, anatomical characters, diagnosis, prognosis and treatment. What ever the cause, the anatomical characters, the clinical history, and the required treatment, are so nearly identical that attempts to differentiate the disease when produced by other agencies than diphtheria from that due to diphtheria, have proved futile and unsatisfactory in localities where diphtheria occurs except in a few instances, as, for example, when croup has been manifestly caused by swallowing or inhaling some irritating agent.

Dr. Smith holds that inflammation of the laryngeal and tracheal surface, whatever its cause, whenever it reaches a certain grade of severity, may be attended by the exudation of fibrin and the formation of a pseudo-membrane; but such a result more frequently occurs in the inflammation caused by diphtheria than in that produced by other agencies. In diphtheria a moderate laryngotracheitis is attended by the pseudo-membranous formation. Dr. Smith's experience leads him to believe that not more than one in eight cases of croup has recovered by medicinal treatment which began in the first week of diphtheria, and in which the symptoms were so pronounced as to indicate more or less laryngeal stenosis. The exudation in the first week of diphtheria, or in its active period, occurs so rapidly and in such large quantity, that no one of the medicinal agents or modes of treatment, which physicians commonly prescribe, is sufficiently prompt in its action to prevent the formation of the pseudo-membrane to an extent that soon endangers life.

Croup occurring in the second or third week of diphtheria, since it is attended by less abundant and less rapid exudation than when it occurs during the acute stage, can be more successfully treated under the persevering use of solvent inhalations, and a larger proportion than one in eight, perhaps one in there, recovers by the early and continuous or almost continuous use of inhalations.

Still the mortality is so large, and the suffering so great in croup, at whatever stage of diphtheria it occurs, that we cannot rely on the slow action of medicines or inhalations, and surgical treatment is in most instances required to diminish the suffering and afford the best chances for saving life.

Under the head of medicinal treatment, he strongly recommends trypsine as a solvent of false membrane. Of calomel, he says: The experience of many physicians justifies the belief that mercury, and especially calomel, employed within certain limits in the commencement of a pseudo-membranous inflammation does exert some controlling action on this disease. That it did much harm formerly when physicians prescribed it as freely as we now employ potassium chlorate, to the extent in many instances of increasing the cachexia and causing mercurialism should not deter us from its judicious use. In the ordinary form of diphtheria he would not advise the use of calomel, or would limit its employment to one or two doses of six to ten grains in the commencement of the disease in robust cases. But in croup, since the danger is not from the cachexia or blood-poisoning so much as from the laryngeal stenosis, which is apt to develop rapidly, that medicine is indicated, and should be prescribed, which most strongly retards the exudative process, and aids in liquifying and removing the pseudo-membrane, provided that it produce no deleterious effect which renders its use inadmissible. Hence it is proper to prescribe calomel in larger doses and for a longer time in the treatment of croup than in other forms of membranous inflammation, if it fulfil the indication as it seems to in a measure. In his own practice, however, calomel is not prescribed after the first or second day, since Dr. Smith prefers the use of other remedial measures, which are efficient, and are less likely to produce injurious effects. The subject of surgical treatment is also fully discussed, and Dr. Smith holds that we can claim for tracheotomy judiciously performed, and at a sufficiently early stage, the cure of one in every three patients on the average.

THE RECTUM.

We are glad to see a more or less general disposition to give that patient and long suffering organ, the uterus, a much-needed rest. Attention of late seems concentrating on its next-door neighbor, the rectum.

Many of our exchanges are devoting a large amount of space to a discussion of rectal diseases and normal and abnormal rectal conditions. Rectal reflexes have all of a sudden been found to be of almost universal prevalence. If a lawyer gets the heartburn, or a minister weakens in the preparation of his Sunday sermon, the probability is that there is something wrong with his rectum.

A late number of one of our exchanges contained four articles by as many different writers, besides an editorial, all calling attention to the rectum; and then it was plain to be seen that only the vestibule of the subject had been entered, as it were. A prominent surgeon of this city has not only *fringed* it, but pocketed it, and, in his enthusiasm, he seems to be conscienceless, and to want to walk off with the universal rectum without a show of compunction.

Whether the rectum will stand as much steady and unremitting abuse as the uterus has done in the last fifty years, is a question.

It bids fair, however, to be a bigger bonanza to the doctors than ever the womb has been. It appertains to both sexes and all ages. From the great-grandfather to the neonatus, the rectum offers itself for inspection and treatment. And the beauty of it is, it suits all tastes in its tolerance of attention. The surgeon can cut it, tear it, cauterize it; blister and burn it; he can expand it, contract it, pinch it and pucker it; plug it and unplug it. The barber can barber it; the leecher can leech it; even the midwife can anoint it, syringe it and empty it.

The doctor can doctor it in any way he ple ases It takes big doses with composure and little doses with a quick response.

It is susceptible of medication both directly and indirectly, and it is a portion of the economy so universally necessary to the comfort, health and life of every single member of the human family that in its possibilities, there is, so to speak, no end to it.

However it may be treated, whether by expert or neophite; it is senseless, earless, eyeless. However much the viscus may be damaged, in the course of its experiences. its hapless owner can't see it and be a reliable witness to malpractice in a court of justice. He can't by sight count its scars, measure in inches the depth of his sphinctral misery. Any error in diagnosis or failure in treatment, while necessarily fundamental and possibly serious in its consequences, is easily covered up for, with a little alum or tannin properly applied, so far as giving anything away is concerned, the rectum may be rendered as "tight as a drum."

The failure, should it occur, may be attributed to a "cold," or to some indiscretion in diet, or to atmospheric or telluric disturbances, to all of which the rectum is highly sensitive.

A sudden and unforeseen onset of microbes may upset the calculations and predictions of the most skilful and astute physician and render negative his best endeavors.

To the coming doctor the rectum presents an opening compared to which a malposed womb or dislocated ovary is nothing worth a thought.

In a word, the womb of the future is pregnancy with golden possibilities regarding the rectum.—*The Medical Era.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, 1 ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

HOW TO DIAGNOSE GONORRHŒA IN THE FEMALE.

The difficulty of differentiating a specific vaginitis from a simple or catarrhal inflammation of the vagina, has probably worried most of our readers. A mistake in diagnosis in these cases is also a matter of very considerable importance. The happiness of a home may hang on the issue. It becomes the physician in such a case to hew the line, let the chips fall where they may; but he must be particularly careful that none of them fall on his own toes. There has, up to the present time, been no pathognomonic sign which might serve as a guide in such a perplexity. At a recent meeting of the Paris Obstetrical and Gynæcological Society, however, Martineau suggested one which may answer the purpose. The pus of the specific vaginitis is said to be always acid, while in the simple variety it is alkaline. A little piece of litmus paper, therefore, will tell the story. The importance of this discovery cannot well be over-estimated. Both on account of social and medico-legal reasons, its importance is very great.—*Medical Age.*

INSTRUCTIONS CONCERNING THE MANAGEMENT OF DIPHTHERIA.

According to the *Journal de Médecine de Paris* (*Archives of Pediatrics*) the Council of Public Health of Paris offers the following concerning measures which should be taken for the treatment of diphtheria:

General Instructions.—Diphtheria is a disease which is markedly contagious. All intercourse of children with diphtheritic patients should be avoided. There is no substance known which will surely prevent diphtheria. It is very important to carefully watch the beginning of every throat trouble. It is necessary to nourish children to the highest available point, especially in time of an epidemic, and not to subject them to the prolonged action of a moist low temperature.

Precautions when diphtheria appears in a family:

1. It is indispensable that every one should be separated from the patient, who is not concerned in caring for him. This applies in particular to the other children.

2. Those who are engaged in caring for the patient must avoid embracing him, inhaling his breath, and being very near him during paroxysms of coughing. If the attendants have any small wounds upon any portion of the body which is liable to come in contact with the patient, they must be particular to keep them well covered with collodion. They should take pains to keep up their nutrition, and go out several times daily into the open air. The hands and face should be frequently washed in a weak solution of boric or thymic acid.

3. The health authorities should be promptly notified at the first appearance of the disease.

Measures of disinfection: 1. Substances which have been expectorated or vomited should be disinfected with a solution consisting of fifty grams of chloride of zinc, or sulphate of copper, to a liter of water. Linen, and all clothing soiled by the patient, should be immediately soaked in one of these solutions, and then placed in boiling water and kept there for at least an hour. All vessels and utensils which have been used about the patient should also be immersed in boiling water, immediately after they have been used.

Whatever be the issue of the disease, the sick-room must be thoroughly disinfected. The operation may be done as follows: All openings into the room having been closed, a pan containing sand may be placed on the floor in the middle of the room; upon this some burning coals may be laid, and upon the coals a quantity of sulphur, varying with the size of the room, may be ignited. (Twenty grams of sulphur to the cubic meter would be sufficient.) The room should remain closed for twenty-four hours, and then it may be freely ventilated. All the clothing, linen, and coverings, which have been used in the sick-room must be thoroughly disinfected with one of the solutions referred to. The mattresses should be opened and left in the room during the process of fumigation.

REPORT OF A CASE OF NASO-PHARYNGEAL CATARRH.

Mrs. C.——, age 45, presented herself at my office, for treatment for catarrh of naso-pharynx. On examination of anterior nares, the walls of nasal cavities were found almost entirely covered with incrusted secretion. Posterior rhinal examination revealed the same condition, differing in the latter, only the incrustations were thicker and more extensive, from the fact that a more capacious chamber existed for their formation; the incrustations were not observed to extend below the superior margin of vellum; it is needless to state, in this case, the odor was stifling and sufficient to impregnate the air of the room in a very short time. Having removed the incrustations, I found the mucous membrane of the naso-pharynx a deep red or rather a livid hue, with several points of abrasion in the mucous membrane; the tissues, both soft and hard, were atrophied to a great degree; the nasal cavities were increased to three or four times the size of normal lumen; the cavity of the vault of pharynx was immensely enlarged; her health, of course, was much reduced from this exhaustive inflammation, which had continued to a greater or less extent for twenty-five years. She complained of cephalagia, neuralgia, rheumatism, indigestion, constipation, palpitation, and a number of other minor symptoms or sequences of catarrh. With the existence of these unfavorable conditions, she began treatment.

Through cleansing of the diseased mucous membrane was instituted;— this cleansing was

performed in the mildest manner possible, compatible with entire success in the removal of all secretion. The detergent used was sodium chloride, water and listerine, sprayed by the use of compressed air, rather forcibly, until the crusts were loosened or removed; then mildly until the surface was entirely free of all secretion. In case the tenacious purulent matter cannot be removed by the spray, a bit of absorbent cotton on a probe, gently applied, will accomplish the desired result.

After thorough cleansing, the diseased membrane was covered with a coating of vaseline in which was intimately mixed a little oil eucalyptus and resorcin. This treatment was applied daily for three weeks, then every other day for two weeks, then twice a week for a while, then once a week for some time; during the interval between visits to my office she was instructed to use as a home treatment, daily, the detergent solution, given above and fluid cosmoline. The constitutional treatment consisted of tonics and aperients with corrections in dietetic errors. Under this treatment the patient rapidly improved, and at present writing, which is eighteen months after treatment began, her breath is inoffensive, hard crusts have ceased to form, and the mucous membrane has become notably thicker; though not perfectly well, the case has been improved, her general health greatly restored, and she is able to take her place in society from which she was ostracised. In conclusion, we wish to state that the above is one of those cases which are generally regarded as incurable, and doubtless an absolute cure is impossible, but the degree of palliation and improvement is so great that it is well worth the treatment.—*N. R. Gordon, M.D., Springfield, Ill.*

INCONTINENCE OF URINE IN CHILDREN.

The *Medical* World thus abstracts Eustace Smith:

"Of medicines which diminish irritability, belladona takes the first place, but it is important to be aware that this remedy, to be effectual, must be given in full doses. Children have a very remarkable tolerance for belladonna, and will often take it in surprising quantities before any of the physiological effects of the drug can be produced. In obstinate cases of enuresis the medicine should be pushed so as to produce dilatation of the pupils, with slight dryness of the throat. In children of four or five years of age, it is best to begin with twenty-five or thirty drops of the tincture of belladonna, given three times in the day, and to increase the dose by five drops every second or third day, of course watching the effect. Ergot is another remedy which is often very successful. For a child of the same age, twenty drops of the fluid extract may be given several times in the day.

Bromide of potassium, benzoic acid (dose five to ten grains) and benzoate of ammonia, digitalis, borax, cantharides, camphor and chloral have all been recommended as specifics in this complaint. Sometimes a combination of several drugs seems to be more effectual than one given alone. I have lately cured a little girl, aged four years, who had resisted all other treatment, with the following draught given three times in the day:

℞ Tinct. belladonna,..... gtts. j,
Potas. brom.,..... grs. x,
Infus. digitalis,..... ʒij,
Aquam ad..... ℥ss.
M. Ft haustus.

When the incontinence continues in the day as well as at night, strychnia should be combined with the sedative, so as to give tone to the feeble sphincter. In these cases, too, cauterization of the neck of the bladder, with a strong solution of the nitrate of silver (℈j—ʒ j. to the ounce of water) has been found successful."

PILOCARPINE IN CROUP.

By John H. Ownings, M.D., of Deer Lodge, Mont.

December 16, 1883, I was called at 4 p. m. to see Lauretta, age 4 years, daughter of J. McA. On arriving found pulse quickened, hoarse whispering voice, short ringing metallic cough, and stridulous respiration. Upon examination of fauces, found a fibrinous patch on the right tonsil about the size of a large grain of wheat. Respiration 36. Tongue moist, but covered with a yellowish white fur. I learned that she had awakened about 2 a. m. with croup coughous and that she had had an attack of croup one week before, which had been relieved by vomiting with syrup ipecac and lobelia, but had had no return of the trouble until this a. m. Cave turpeth mineral, gr. 3, and after vomiting freely ordered calomel, ½ gr.; pulv. ipecac, ¼ gr., to be given every hour, with hot fomentations to neck.

9. p. m. Patient much the same. Gave pulv. alum, 1 dr., which was followed by copious vomiting. Hot fomentations and muriate and ipecac continued, promising to call in morning.

7 a. m., 17th. Patient growing worse. Rough hissing or crowing sound both on inspiration and expiration.

Gave turpeth mineral, gr. 5, and ordered tr. verat. viride in ½ drop doses with potassium bromide, gr. 10, every hour, hot fomentations continued, muriate and ipecac discontinued.

11 a. m. No perceptible change.

4 p. m. Stridulous respiration, increasing loss of voice. Gave turpeth mineral, 5 grs., which was followed by scanty emesis. Ordered patient to be kept enveloped in steam from slacking lime, and to give:

℞. Tr. eucalyptus, ʒ v.
Mur. pilocarpine. gr. ½
Vin. pepsin. ʒ j.
Syrup tolut. q.s. ad ʒ iv.

Sig.—Give a teaspoonful every half-hour.

8 p. m. Called Dr. M. in consultation, for the purpose of performing tracheotomy. Breathing somewhat easier. Gave 3 grs. turpeth mineral, which was followed by vomiting of a large quantity of mucus with shreds of fibrinous membrane. Ordered treatment continued, promising to return in a few hours.

2 a. m., 18th. Breathing great deal better. During last act of vomiting a large quantity of membrane came away, and is now expectorating a good deal of tough, yellowish fibrin, with frothy sputa.

6 a. m. Crowing cough gone, breathing easy, has been taking beef tea and wine. Ordered eucalyptus and pilocarpin to be given every hour, with generous doses of wine and beef tea.

4 p. m. Patient still improving: breathing natural.

19th, 10 a. m. Patient quite bright: has taken some solid food; cannot speak out loud; has had action of bowels, but urine very scanty. Ordered nitre, juniper, and digitalis, and the eucalyptus and pilocarpin stopped.

21st. Patient convalescent, and visits discontinued.

26th, 2 p. m. Called again to see this little patient, and found a return of disease, with all its horrors. Resumed eucalyptus and pilocarpin, giving it every hour, and directed that three grains turpeth mineral be given every four hours, with lime steam and hot fomentations.

9. p. m. With every act of vomiting shreds of membrane are given off, tinged with blood.

27th, 9 a. m. Patient better. Treatment continued, lengthening the interval between the doses of eucalyptus and pilocarpin to two hours.

28th. Patient still improving. Eucalyptus mixture every four hours, and the diuretic given three times a day.

30th. Patient convalescent.

Since the date of the foregoing case I have had three others, and treated them the same. Two recovered, one died; the latter, some twelve miles from town, I visited twice, and in view of the poor nursing the child received, do not think the treatment had a fair chance.

I have also used the eucalyptus and pilocarpin in fifteen cases of diphtheria, with only two deaths. Tincture iron and quinine, with whisky, were given freely, but I am inclined to think that to eucalyptus and pilocarpin I owe my success in this disease. I have used pilocarpin freely in follicular tonsillitis with the best of results, and mention these facts for the purpose of calling the attention of the profession to them, believing that, if properly used, they will not disappoint.

Dr. T. Gaillard Thomas gives it as his opinion that the diagnosis of pregnancy at any time less than three months from its inception is an impossibility, and insists that this fact remembered in examining a woman whose menses have stopped, would guard the physician against error.

THE CONTAGIOUS SKIN DISEASES.

Dr. Arthur Van Harlingen very particularly remarks, in the *Polyclinic*, that one of the first questions which occurs in the study of skin diseases, and usually the first one which the patient puts to the physician is, "is this disease contagious?" It is a question that ought to be answered at once, and as the number of the contagious skin troubles is small, they ought to be thoroughly studied in order that the patient may be given the proper answer to his question unhesitatingly. The dermatic affections which are contagious are all of the syphilodermata, although to a greater or lesser degree. Then we have scabies, the various forms of pediculosis, ringworms, parasitic sycosis, favus, tinea versicolor, impetigo contagiosa, molluscum epitheliale (m. contagiosum), and some of the rarer troubles, such as farcy. If, as is asserted by a number of good authorities, lupus, lepra and other affections depend upon specific bacilli they are, to a greater or lesser degree, contagious also, and might be included in such a list. The supposition of such a quality at all events would do no more than diminish the danger of such an accident occurring, and could do no possible harm.—*St. Louis Med. Jour.*

NITRO-GLYCERINE, NITRITE OF AMYL AND NITRITE OF SODIUM IN CARDIAC AND RENAL DISEASES.

Nitro-glycerine and nitrite of amyl have for some time been extolled in the treatment of mitral and aortic diseases, and also in granulated kidney. In a great number of cases these agents act very efficiently, relieving and dispelling some of the most alarming and conspicuous symptoms, such as chæmicranea, the array of phenomena which characterize a paroxysm of angina pectoris, and also many of the phenomena which indicated the presence of uremic poison. As these affections are manifested by more or less cardiac weakness and high arterial tension, the modus operandi of these medicaments consists in energising the heart's action and lowering the blood-pressure, this wise relieving anæmia and venous stasis, aiding, thereby, the elimination of effete matter through the renal excretions.

Nitro-glycerine, which may be administered either in solution one per cent, or in pill form, has the great disadvantage of being uncertain in its action. Sometimes, one single drop or one pill produces very severe phenomena, referable to the head; others, a dose tenfold larger receives no response from the system. Nitrite of amyl possesses not the inconveniences of nitro-glycerine; is of easier and readier administration (from 5 to 10 drops by inhalation), but its action is transient and ephemerous. It is adaptable to cases of great emergency, as the advanced guard of other potent agents, which require longer time to provoke their physiological action.

Nitrite of sodium is calculated to supersede the other medicaments. It is odorless and without

aste, freely soluble in water, and, in the dose of one grain, three times a day, is an efficient medicament, in the same pathologic conditions wherein nitro-glycerine and nitrite of amyl find indications.

Cerebral phenomena and others referable to the nervous system, when induced by this agent, are of a mild and transitory character, and the benefits derived from it are lasting and manifested a few hours after the initial dose, if it meets with a favorable response from the organism.

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie (*N. Y. Med. Jour.*), of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria, every hour until relief is felt, or until six have been taken.

Dr Wylie states that sick-headache, as such, is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*Detroit Lancet.*

TREATMENT OF ECZEMA.

Henry J. Reynolds, M.D., Prof. of Dermatology in the College of Physicians and Surgeons of Chicago, read a paper on this subject at the Illinois State Medical Society.

Therapeutically speaking, he regards the disease as always either acute, sub-acute, or chronic, regardless of its clinical name or location, and arranges the treatment accordingly. In the acute, as in all other acute inflammations, the great principle necessarily involved is *rest*, which implies not only quietude of the member or part, but *rest from all irritating influences*. Soothing and protecting measures, therefore, are indicated in this stage, among which may be mentioned carron oil, poultices, etc. In the sub-acute as in all other stages and forms, scratching must be strictly prohibited, as it is the most fruitful of all sources of aggravation.

He uses in this and the chronic condition (either of which may at any time develop acute symptoms and require the treatment changed accordingly) pure, impalpably fine boracic acid as a dusting powder; having first gotten rid of crusts and scales by soaking with oil and washing with soap and warm water. In the chronic, however, he uses greater stimulating measures, in the way of green soap frequently rubbed in during washing. He thinks bandaging and strapping advisable whenever practicable, prefers the cotton roller to the rubber, where there is much exudation or maceration of the skin. He has but little faith in the popular skin remedy, arsenic, in this or any other disease; all he knows *positively* of the remedy is that you *can* do harm with it. Chrysarobin, internally, as recommended by Stocquart, he has tried without any benefit.—*St. Louis Med. Jour.*

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THE LATE DR. MARSDEN, QUEBEC.

The sudden and unexpected death of Dr. Marsden, of Quebec, which took place on the morning of the 16th of December, has cast a deep gloom over the city where he has so long resided, and among the profession of the two older Provinces of the Dominion, by whom he was well known and appreciated. Although advanced in years, it seemed to his friends that he preserved the keenness of intellect and activity of body of a man twenty years his junior. For the two months preceding his death Dr. Marsden, once every week, travelled to Montreal to take part in the deliberations of the Provincial Board of Health, of which he was a member. The writer of these lines sat with him on this Board, and when, at the meeting held on the 15th of December he complained to him of feeling so unwell as to be obliged to leave before the sitting was closed, he little thought, as he shook hands with him, that his end was so near. Accompanied by one of his colleagues on the Board, Dr. C. E. Lemieux of Quebec, he took the night train home. During the night he grew rapidly worse, and, had it not been for the constant attention of Dr. Lemieux, he would have died before reaching Quebec. He was alive, however, when the train reached there, and very gently removed to his home, where, in the presence of his aged wife, he quietly passed to his rest. The death of Dr. Marsden was a typical close to an active life, and to a certain extent he fell a victim to a cause—that of the public health—to which he devoted a large part of his life. To a person of his years a weekly journey at this season of the year to Montreal was no small undertaking, and it was in consequence of a cold caught in the sleeping car that pulmonic congestion came on and terminated a valuable life.

Dr. Marsden was born at Bolton, Lancashire, England, on February 18th, 1807, and came to

Quebec in 1812, where he has since resided. He was educated at the Royal Grammar School there, and completed his medical education in London and Paris. He had been a medical examiner for more than thirty years, and ranked high as a medical jurist and consulting physician. Before the incorporation of the Quebec Medical School and Laval University, he for many years delivered, with great success, courses of lectures on Anatomy and Physiology, Surgery, Materia Medica and Botany. Dr. Marsden largely contributed to the medical press of the Dominion. From 1827 up to recently his pen has been devoted to science and literature, poetry and prose. In medicine and surgery he has written much for the London *Lancet* and for our Canadian Medical Journals. From 1851 to 1854 Dr. Marsden took a large share in the editorial management of the Quebec *Mercury*, writing on the question of public health and quarantine. He published a complete history of Asiatic Cholera, its etiology and pathology commencing with its outbreak in India in 1817. He was an ex-president of the College of Physicians and Surgeons of the Province of Quebec, of whichhe was senior Governor. He was also an Honorary Fellow of the Medical Botanical Society of London, a Corresponding Fellow of the Medical Society of London, an Honorary Fellow of the Lyceum of Natural History, and of various other learned bodies and societies, and had the degree of M. A. conferred upon him by Bishop's College, Lennoxville.

He had been President of the Quebec Medical Society and also of the Canadian Medical Association, of which he was one of the principal founders. He was assessor of the College of Physicians and Surgeons at Laval University.

There are few citizens of Quebec who will be more missed than the deceased, as he took a very active interest in all that concerned her welfare for about half a century. Whether in civic affairs, in the affairs of the Church of England, of which he was a devoted member, of our charitable institutions, or those connected with his profession, he was always prominent and zealous. At the time of his death, Dr. Marsden was chairman of the Commission of the Marine Hospital, and he was lately indefatigable in his efforts to prevent the small-pox scourge from visiting that city as he was formerly in his doing his best to quarantine cholera. The life just ended was mainly spent in the prevention and alleviation of the ills of his fellow-creatures. Ripe in years he descends to the grave, esteemed and regretted by all who enjoyed his acquaintance leaving the beloved partner of his life for more than fifty years to mourn her irreparable loss; and to her we extend our most heartfelt sympathy and condolence.

LOCAL AND GENERAL.

St. Cunegonde still retains the unenviable notoriety that attaches itself to a community careless of small-pox. It remains to be seen whether the Central Board of Health and the Civic Board possess between them sufficient backbone to insist upon proper sanitary measures being carried out. In the meantime it appears strange that such a large force of isolation police should be sent out to assist in barricading the municipality when they were totally unarmed either with the material or legal requirements of offence or defence.

A company of volunteers with loaded rifles are worth ten times their number of special policemen. The average French rough knows from previous experience that it is his special privilege to shower stones, bottles and other description of brickbat upon the policeman's defenceless head, and he is aware, too, that he is pretty sure to escape the punishment that ought to follow such cowardly conduct. If the better portion of this island were not specially interested in rooting out variola from St. Cunegonde the inhabitants of that favored section might have the disease to their heart's content, but, unfortunately, the "sheep" mingle with the "goats," and unwilling victims are the result. In the city proper there is now very little small-pox; it has burned itself and has been vaccinated out of existence.

Apropos of this, an "Anti-Vaccination League" has been started in this city for the purpose of enlightening the public on the dangers of that serious and startling operation. Doubtless if a "Pro-Small-pox Society" were begun it also would receive a certain amount of support. In connection therewith a paper advocating the value of small-pox, and called, "The Weekly Variola," might find favor among the members. Evidence might be found to show that small pox "clears the blood" of various "humors," and is not that odious affection which some persons imagine it to be. Statistics could be brought forward to show that the healthiest countries are those in which small-pox has raged; the names of eminent scientific and literary men and

women who were fortunate enough to get the beneficent malady might be published in large type, pointing out at the same time what increased vigor each exhibited after recovery; certificates testifying to the better health enjoyed by patients after a couple of months' quiet in St. Camille or St. Saviour's would be forthcoming—in fact, about as many special pleas on the side of universal variolation as are usually adduced to bolster up the worn-out creed of the Anti-vaccinationist. Increased facilities might also be arranged for the successful propogation of this desirable blessing among the rank and file of the Society.

When the supply of pure "picotte" runs low here, resort might be had to inoculation, or a few variolous patients might be "imported" from St. Cunegonde for the exclusive use of those members who were not fortunate enough to have previously contracted the disease. The "League" has been started rather late in the day, for anti-vaccination is fast getting to be a dead issue here, but the "Pro-Smallpox" might still have months of usefulness before it, as there is still a fair percentage of the community who have not yet indulged in the delights of the disease. I am, of course, aware that certain anti-vaccination "martyrs" have been threatened with the law, but if they will only use their influence to have the "League" converted into a "Society" of the kind described above, and will carry out its provisions in detail, although the membership of the Society may in time diminish, from natural causes, yet the *raison d'être* of the League will have departed and legal proceedings may be dispensed with!

To speak seriously for a moment, because the subject is a very serious one, it passes my understanding, first, how men of good judgment in *other* affairs (and the leaders of this movement are, to my knowledge, men of that stamp) can so contemptuously reject evidence of a kind which has so successfully appealed to minds of all kinds and conditions; and in the second place how, having decided to oppose vaccination, they should attack it at that point where its greatest strength lies, viz., its efficacy and freedom from danger. Something may be said against the expediency of *compulsory* vaccination, but the merest tyro, the most superficial observer of the epidemic just leaving us, must acknowledge the protective value and trifling character of the procedure called vaccination.

Somebody should protest against the Pasteur hydrophobia rage—against the unwise publication of sensational newspaper reports, and against the absurd conclusions arrived at from the inoculations already made by him. Pasteur may be depended upon to tell his own story correctly, but the value of rabious inoculation can only be properly placed when we know (1) how many of Pasteur's patients were bitten by animals suffering from *genuine* rabies. (2) Whether the percentage of recoveries is greater in these instances than in cases where other treatment has been exhibited.

I am inclined to believe that only a very small proportion of patients who take the pilgrimage to Paris for treatment are in any real danger from hydrophobia, and that this sensation, like many another that has in the past agitated the human mind, will in time give way to something newer or more attractive. In the interim everyone will wish that the noble French scientist will be able to add from the rewards of medicine to the lustre which surrounds his successful efforts in other departments of science.

Dr. Chadwick of Boston has given us his experience of "ten cases of pregnancy complicated with fibroids, with remarks." The results are as follows:

Miscarriage	1 case
Recovery of mother	7 cases
Death of mother	2 cases
Living child	7 cases
Stillborn child	2 cases

He says that intra-uterine disinfectant douches should be begun long before secondary symptoms set in.

P. A. LAVER, M.D.

MONTREAL, Dec. 28, 1885.

REVIEWS.

Lindsay & Blakiston Visiting List for 1886.

This list, published by P. Blakiston, Son & Co., of Philadelphia, is advertised in our pages. Reference thereto will show the price at which it can be obtained. We still use it and have done so for twenty years, and believe it, take it all in all, to be the best Visiting List issued. If this should be read by any medical man who has not yet adopted the plan of using a Visiting List, we advise him not to delay longer. Its use will save its value ten times over every week of the year.

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CLINICAL LECTURE, AT THE PENNSYLVANIA HOSPITAL, PHILADELPHIA.

By THOMAS G. MORTON, M.D.

Reported for the *Canada Medical Record* by Dr. J. F. Edwards.

MUSCULAR ATROPHY FROM INFLAMMATION OF NERVES.

I have before spoken to the class about the changes that will take place in a part consequent upon inflammation and secondary changes in the nerves of such part. If a nerve be injured or from any cause inflamed, it will become sclerosed; even if the inflammation originate in a branch or a filament of the main nerve it will extend up to it, and the nerve, as I say, becoming sclerosed, the nutritive life of the part will be interfered with, and it will atrophy, so that after an injury to a nerve there will always ensue more or less atrophy. It is of practical importance for you to remember this, for it may help you out of a scrape. It will sometimes happen that, after you have operated upon a child for club-foot, this atrophy, the cause of which has been congenital, or at least has arisen from what I have already told you, will cause the parents to claim that you have cut or injured some nerve or some part that you ought not to have cut, and you may be bothered with a suit for malpractice. The small branches, as I have said, may influence the main nerve, and, though the synovitis (which may have been the original cause of the trouble) may be well, still the sclerosis will go on. We have such a case before us. This young man has had a synovitis, there can be no doubt of this, for you see the swelling and tumefaction about the knee, while there is luxation forwards of the femur or backwards of the tibia, whichever you may choose. As a result you see how this limb has atrophied. Some might claim that this atrophy was due to want of use, but such is not the case, a very slight amount of the atrophy might possibly be due to this cause, but the young man has been able to walk about all the time, so that his leg has been exercised and we must therefore look beyond disuse for the cause of the atrophy, and this atrophy, just as in the wasting of club-foot, will be permanent; the atrophied limb will never catch up to the other one, there will always be a marked difference. You will always find the limb, and the foot itself, from an inch and a-half to an inch and three quarters shorter in the clubbed side than on the other. Some have claimed that congenital club-foot is due to intra-uterine pressure, but this is an error; it is caused, just as is the acquired disease, by the nervous changes already referred to. To return to the case before us, I introduce a probe into this fistula, and find dead bone at the bottom; now this fistula will never heal so long as the dead bone, or indeed any other foreign body, remains at the bottom of it; such fistulas will sometimes persist for forty or fifty years unless the cause be removed. In some cases the process of separation by nature is so slow that in order to aid her we would be compelled to make such a large wound that we are compelled, by prudence, to let it alone and wait for the slow process of nature. I will now apply the Esmarch bandage and see what it is best to do. I must be very cautious in this case, for the fistula is in the close vicinity of the femoral artery. The

finger is the best probe, and when I have insinuated my finger down to the bone, if I find the necrosis near the other side from that in which the fistula is, I will consider the advisability of removing the sequestrum from a counter-opening on the other side, which would insure better drainage. In such a case as this, if you could absolutely promise the patient that he would recover, it would be the better plan to amputate, because an artificial limb would be much more useful than this crippled member can ever be; but the risk would be great, and we would not be justified in taking it. When I try to introduce my finger, I find considerable difficulty for, as is often the case, the tissues about a fistula have become very dense. Now I find a large piece of bone loose, and I can readily remove it without making any new incision. The operation, as you see, has been bloodless, but, now, when I remove the Esmarch, considerable hemorrhage occurs; the granulations covering the bone are very exuberant, and they bleed almost as would an artery. This is a good sign, for it shows that there is a good blood supply to the part, that will favor the reparative process; it is readily controlled by a bandage from below up the limb and elevation.

GUNSHOT INJURY—AMPUTATION.

Six weeks ago, this man, who is 30 years old, was loading a gun, when it discharged prematurely, driving a portion of the ram-rod into his hand. The presence of this foreign body was not suspected at the time, but two weeks later it was found and removed. Free drainge was procured, but the injury to the deeper structure had been very severe; the wrist joint was opened; the carpus destroyed, and even the ulnar was involved. Abscesses formed and the pus burrowed along the flexor-tendons, causing abscesses in the fingers and it also extended up the arm. There has been so much disorganization that we have decided to amputate, because we cannot hope to save the hand. When I merely shake the hand you can hear the carpus rattle. Necrosis of the bones of the wrist is very unsatisfactory to treat without operation; with the ankle it is different, because there are less bones, they are larger and there is more nutrition; while in the wrist, the bones are smaller and less abundantly nourished. Such a case, if it healed at all, would leave a stiff and useless hand, but it would be much more likely to destroy the patient by exhaustion from repeated suppuration. When to amputate is a question to decide. If it is performed within twenty-four hours after the injury it is a primary operation; at any subsequent time, it is secondary. After the receipt of the injury there is a condition of shock, when the thermometer will pursue a zig-zag course for some time, as one abscess after another forms and opens, the system being impressed by the pus formation, and relief produced by its evacuation. After three or four weeks the system becomes habituated to the discharge, the condition becomes chronic, the functions were in a fair condition, and it is now a favorable time to operate. If it be postponed, the patient is liable to become exhausted, colliquative diarrhœa may set in, and the result prove disastrous. When this man first came in his temperature was 104°. During the course of the abscesses it varied from 98 to 103°, and now, for a week, it has been nearly normal. This shows a good indication for the operation, and if we postpone it longer the pus may extend up the arm, form more abscesses, and necrosis of the radius may be added to that which we already have. Now, as to the site of operation. In this point we must be guided by the disease, and in this case I think the best point will be just below the middle of the fore-arm. Now we have a variety of methods of operation to select from: the circular; the oval; transfixion and Teale's. It will be best to make our flaps so that the scar will be on the under surface. We need not here fear retraction of the flaps, as in primary operations, because the exudation has so consolidated the parts that much of the elasticity has been lost. In this case I will not use the Esmarch, because such great pressure might crush the blood-vessels near the seat of the injury and interfere with the nutrition in the flaps; therefore I will preferably use a tourniquet. On the posterior surface of the arm I will make a long, rectangular Teale flap. Always try to have the larger vessels of the limb in the shorter flap. Now there is a triangular space on the under surface of the arm where there has been a loss of tissue, but, rather than disarticulate at the elbow, I will excise this denuded piece and stitch the edges together. You will always have more hemorrhage in secondary than in primary operations, because the small vessels which, ordinarily, are hardly perceptible, have, in the progress of the disease, become dilated, and they have also lost much of their contractility.

So that here you see we have considerable hemorrhage; that from the smaller vessels can be

readily controlled by towels soaked in very hot water—almost scalding hot. We used to use cold water for this purpose, but I derive quicker results from the use of very hot water.

Progress of Science.

ON THE TREATMENT OF ACUTE RHEUMATISM.

Dr. W. R. Thomas spoke thus before the British Medical Association :

"Our knowledge of the treatment of acute rheumatism is making rapid strides day by day ; but still we frequently meet with cases which are most unsatisfactory to treat, because, I believe, our knowledge is in its infancy. In medicine, we are all apt naturally to follow fashion. Certain remedies are recommended highly, and we are inclined to take it that all cases of rheumatism can be cured by the same remedy. Given a case of acute rheumatism, all we have to do is to give salicylic acid, or bicarbonate of potash, or nitrate of potash, or a certain other remedy at the time recommended, and attend to the ordinary directions given as to diet and hygiene, and the patient gradually, or often rapidly, is sure to improve. That is what we expect. Now I have tried each of the remedies recommended on a large scale in both hospital and in private practice, and have come to the conclusion, after noticing carefully, and I think without prejudice, the effect of each one, that there is no one grand remedy for the disease we call acute rheumatism. The bicarbonate of potash, which has always been a favorite remedy of mine, I have seen act like a charm ; so also have I the nitrate of potash ; and then again, other cases I have met with where the remedy has entirely failed to have any effect whatever upon the disease. During recent years I have given, time after time, salicylic acid in large and in small doses, and have been delighted at the immediate good effect, thinking that, at last, we had met with a certain remedy ; then again, other cases have occurred where the salicylate of soda has had no appreciable good effect whatever, even when given in large doses, until certain symptoms were produced by the medicine.

"I do not think the remedies in these cases are at all at fault. When we prescribe a certain medicine in a certain case, we find that the patient derives immediate and surprising benefit ; and then we give the same remedy in another case, which to us appears to be similar, and are surprised at the patient not receiving any benefit whatever. Now, why should this occur? Simply, I believe, because we have separate and distinct varieties of rheumatism, each one of which requires a treatment of its own. In one case, the salicylate will act well ; in another, it will not have any effect at all.

"In hospital practice, we naturally attribute all the improvement that take place after admission to the medicine which has been prescribed. A patient is admitted ; his temperature may be very high, his pulse very frequent, and the joint-signs may be severe ; in two days he is in a comparative state of comfort. In many of these cases, no doubt the removal of a patient from a miserable hovel in a back lane, where the surroundings are of the worst kind, to a comfortable bed in a well ventilated ward, where cleanliness is predominant, where warmth, proper food, and constant nursing are supplied, may have much to do with the rapid improvement which has taken place ; and I do not think that we are justified in attributing all the improvement which takes place—at all events, during the first few days—to the medicines prescribed.

"In practice I generally find that we have at least three distinct varieties of rheumatism :

"1. The sthenic.

"2. The asthenic.

"3. That variety caused and preceded by other diseases, as gonorrhœa, scarlet fever, etc.

"The first kind I have generally found among the well-to do classes ; sometimes among the poorer. The patient, perhaps a commercial traveller or merchant, has always been exceedingly well, and until lately has enjoyed very good health. For some months he has suffered from dyspeptic and hepatic derangements ; his urine has generally been very high colored, and a large amount of sediment has been noticed daily in it. He has complained of frequent headache, backache, and aching of limbs. He is florid, and probably very stout, and has found that he has not been able to go through the same amount of work as he formerly could. Evidently he has eaten and drunk more than his body has been able to use and burn up daily ; and the several excreting organs, having had too much work thrown on them for a considerable time, are not now able to perform their functions properly.

"I shall not deal with the pathology of rheumatism at all ; but in this patient there is a tendency to inflammation of certain tissues, and to the accompanying fever. He now sleeps in a damp bed, or catches cold in some way, and now comes on the attack. These are the cases where salicylic acid, salicylate of soda, and the bicarbonate of potash are beneficial. Of the two, I am inclined to think that I have seen more benefit derived from the salicylate than from the bicarbonate ; but I frequently begin by giving the salicylates, and then go on with the potash. Attention to little details we all find in rheumatism, as in all other complaints, of great importance ; for instance, covering the whole of the front of the chest with a layer of cotton wadding has often, I am sure, prevented an attack of pericarditis from coming on, and I found a night shirt of very thin wool very useful, as these patients, perspiring much, are very apt to catch cold : in fact, I now recommend all

my rheumatic patients to wear it regularly, and many have been very thankful for the advice. With regard to the joints, I have found wrapping the affected bones in cotton-wool all that is, as a rule, necessary, but when pain has been very excruciating, hot fomentations, with solution of belladonna sprinkled on the flannel next to the skin, have given relief. For pericarditis, my patients have generally seemed to be relieved by turpentine stupes, followed by linseed-poultices; but unless it seem to be severe, I think it is advisable not take away the cotton-wadding or to apply anything else, for I feel sure that the less these patients are exposed the better. If possible, I avoid giving anything to procure sleep, but, when obliged to do so, I find our old friend Dover's powder the best. These patients generally require something to act upon their chylopoietic viscera; and I must say that I find nothing equal to five grains of pilula hydrargyri, followed by haustus albus, which draught has often to be repeated. As to diet there is nothing better for them than milk; and when the fever begins to subside, we can afford to be more generous.

"The asthenic patient is thin, pale and weak to begin with, from some cause or other; perhaps an over-worked and over-anxious young man, who in his desire to get on in the world has always neglected himself, and has taken his meals (and of them but little) irregularly; or a young mother, with one or two children, living on little else than tea. These patients have the same local signs and the same fever as the other patient had; but although there is the same tendency to inflammation of certain tissues, and the same fever, the tendency has, I believe, been produced by different causes entirely; and to obviate this tendency, or to remove the cause, we must, I think, adopt a very different mode of general treatment from what we do in the other class. These patients require plenty of support from the beginning, and we cannot give anything better than milk to begin with. Soon this patient will require beef-tea and other foods. As an internal remedy, I think we have none to equal quinine, giving from the beginning. Occasionally we may have to give other remedies when called for, but quinine is the remedy upon which we have to depend; and later on, I invariably find that the addition of iron to the mixture is beneficial. The same local treatment is required in these cases as in the other. As aperients, colocynth and aloes are preferable to the mercurial and haustus albus.

"My object in speaking to-day is to express my candid opinion that we should not treat all cases alike, but first of all should take in to consideration the class of the patient we have to treat, and then to decide what remedy or treatment to choose—In one case it may be potash or salicylate, in other quinine. Of course, the treatment of rheumatism following other diseases will be different, as such will have to be taken into consideration."

ON ANESTHETICS.

In a paper read at a meeting of the British Medical Association by John Chiene, Esq., Professor of Surgery in the University of Edinburgh, he says:

The present outcry against chloroform is the result of an imperfect understanding of its physiological action; the proper method of administration; the dangers which may accompany its use, and their treatment.

Proper method of administration. Simple means are the best. A towel or handkerchief is better than any apparatus. If any apparatus is used, then the administrator trusts to the apparatus; the only sure trust is knowledge of the action of the drug, its dangers and their treatment. It is a matter of no importance how much is poured on the towel, except as a matter of economy; what has to be carefully attended to is the effect of the drug upon the patient. The administrator has to give his entire attention to the effect of the drug; The administrator must have his catch-forceps attached to his coat, and have confidence in himself.

In hospital practice, for the last eighteen months I have used Allis's ether-inhaler. By it chloroform is saved, and it is a convenient method of administration. As a rule I think the patient drops more quickly under the influence of the drug. The administrator must watch the breathing and the appearance of the patient. The sense of feeling with the hand between the towel and the mouth is the best guide to the breathing. The heaving of the chest is also to be watched. The heaving of the abdominal walls is deceptive, as this may be due to contractions of the diaphragm, which may continue for some time without any air entering and being expelled from the chest. Voluntary stoppage of the breathing frequently occurs early in the administration. Experience will soon enable the administrator to understand this, and to distinguish it from stoppage of respiration due to the action of the drug on the nervous centers which govern the muscles of respiration. The sense of hearing may also assist in enabling the administrator to judge of the breathing. In antiseptic surgery the use of the steam-spray, accompanied by a hissing noise interferes with the sense of hearing; in such cases the surgeon must trust to the senses of touch and sight. If the breathing becomes shallow or irregular, accompanied by gasping or sighing, then the towel must be at once removed from the patient's face. When the breathing becomes deeply stertorous, then the patient has, as a rule, had sufficient; the towel must be at once removed. Stertorous breathing is not in itself an evidence of danger.

The appearance of the patient's face is also to watched. As long as the lips are red, the blood is being properly aerated, the circulation and the heart's action are unaffected. If the patient become livid or unnaturally pallid then there is danger.

Tell the patient that he is to take long breaths. Give the drug slowly at first, in order to prevent a choking sensation. Do not let the towel rest on the face, because it is apt to cause blistering. After a time the patient struggles involuntarily. Do not fight with him; guide his movements; and as the drug takes effect, they will soon subside.

How are you to know when the patient has had enough? There are three signs, all of which should be made use of.

1. By touching the conjunctiva. If the patient do not contract his orbicularis palpebrarum, then he is generally sufficiently under the influence. Sometimes, however, this is not a certain sign. The action on the nervous centers is progressive; although sufficient for an operation in the region of the eye, the drug may not yet have affected the whole of the spinal cord and reflex action in the limbs may not be abolished.

2. Muscular relaxation, judged of by raising the arm and seeing if it fall heavily by the side.

3. Local sensibility at the seat of the operation. This is to be estimated by the surgeon pinching the part to be operated on with a pair of artery-forceps.

These three signs are all useful, and experience will enable the administrator to estimate their proper value in each case. Take away the towel the moment the patient is under the influence. A very common mistake is to suppose that, if the patient be breathing, then all is right. When the breathing stops then the patient is on the point of death.

No attention is to be paid to the pulse; it is the last thing that stops. When the stoppage of the heart's action is due to the drug, then the patient is dead. Fortunately, the poison is a volatile one; and if, from ignorance, too much has been given, interfering with the action of the heart, either directly by acting on the nervous centers which govern the heart's action, or indirectly by stoppage of the circulation, the heart may recover itself if the patient be kept alive by artificial respiration until the poison, in consequence of its volatility, is dissipated.

The administrator has to devote his attention to other things; and, if he attend to the pulse, he can not pay sufficient attention to the more important signs—important because they occur earlier in the administration. Attention to the pulse by a second person is not necessary, because the signs which I have already given will be quite sufficient to prevent danger. There is a division of responsibility. Assistance is apt to make the administrator trust to his assistant, and not to be sufficiently watchful himself of the other signs which guide him in the administration. It is not necessary to use the stethoscope in order to test the propriety of giving chloroform. If there be heart disease, or weak action of the organ, then these are the very cases in which chloroform is most useful, because they are most liable to the occurrence of shock, which the drug prevents by absorbing rest lightly.

The dangers which may accompany its use and their treatment. We must always be prepared for these. They may occur in any case, because the drug acts with much greater rapidity in some cases than in others, and we can never in any case foretell how rapidly the drug may act. The frontier line between the abolition of sensation, voluntary motion, and reflex action, and stoppage of the circulation and heart's action, is often very indistinctly marked. In old people this is the case; to them, the drug must be administered with the greatest caution.

[I have occasionally seen troublesome symptoms in young children; and, while I say that in old people the drug must be given with the greatest caution, I do not wish it to be understood that children can take it without risk.]

We may reach the dangerous effects earlier in some than in others; hence the great care necessary in every case. The order in which the effects take place is the same in all. This must be distinctly understood.

These dangers may be classed under four heads:

1. *The tongue falling back* and closing the glottis, in consequence of paralysis of the muscles which hold the tongue forward. The signs of this are lividity of the face and shallow breathing, as the air does not enter and leave the chest in sufficient quantity. The patient is in the same state as if a piece of meat had stuck in his pharynx, closing his glottis. The piece of meat is his tongue.

2. *The glottis closing*, due to paralysis of the intrinsic muscles of the larynx. The signs of this are lividity and a crowing sound, as heard in a case of croup, acute laryngitis, or laryngismus stridulus.

3. *Fainting.* This is due to an imperfect supply of blood to the brain, the result of either the sitting posture during administration, as the dentist's chair, or to a naturally weak heart in the aged or prematurely aged person. The sign of this is unnatural pallor of the face, judged of more especially by the paleness of the lips. The faintness may be due also (at the commencement of the administration) to fear on the part of the patient. It may also be due to any cause which may give rise to faintness in general. In this case, the chloroform has nothing whatever to do with the faintness; it may be associated with, but in no way due to, the chloroform. The faintness may also be due to want of confidence on the part of the administrator. He fears the drug, from ignorance of its physiological action. He commences the operation before the patient is sufficiently under the influence. The patient is then in a condition which renders him most liable to shock. He is unable to brace himself up to bear the pain; his nervous centers are in a semi-paralyzed condition. The unfortunate result may follow, namely, imperfection or stoppage of the heart's action, followed by syncope.

4. *Vomiting.* This is only dangerous if there be food on the stomach. The food passes into the pharynx, and may pass through the semi-paralyzed larynx, and cause suffocation by passing into the bronchi. If the stomach be empty, this danger can not occur.

The treatment of these dangers is as follows:

1. *The tongue falling back.* The head is to be turned on one side, in order that, by its weight, the tongue may pass to one side, and the opening of the glottis may be free for the entrance and exit of air. If this do not at once effect the object, then the tongue must be removed from its dangerous position, and for the same reason that, if a person be choking from a piece of meat lying on his glottis, the proper treatment is to remove the obstruction. The best way to do this is to seize the tongue with the catch-forceps and pull it forward so that the tip of the tongue appears between the teeth.

2. *The closure of the glottis,* due to paralysis of the intrinsic muscles of the pharynx. To remedy this danger the tongue must be pulled forcibly out of the mouth. By so doing, the epiglottis is pulled forward by stretching the ligaments which unite it to the tongue; the epiglottis, passing forward, stretches the aryteno-epiglottidean ligament, and separation of the vocal cords follows. The action here is purely mechanical, and was first explained to me by Dr. John Wyllie, who first described this effect of forcible traction on the tongue. This can be verified on the dead subject.

[From further experience, I am inclined to lay greater stress now than I did in 1876 on the view of Lister, published in Holmes's System of Surgery; namely, that the forcibly pulling forward of the tongue acts reflexly, stimulating the respiratory centers. I can not, however, lay altogether aside the mechanical theory described in the text. Lister's theory has strong corroboration in what I have seen of Mr. Joseph Bell's practice in the Royal Infirmary here. In case of shallow respiration with or without lividity, in which the forcible pulling forward of the tongue has no immediate effect, he at once pushes his finger into the glottis; here the action, undoubtedly most beneficial, is two-fold, mechanical in opening the glottis, but mainly, as Mr. Bell holds, and I think truly, by irritating an excessively sensitive surface, and in this way reflexly stimulating the respiratory and cardiac centers.]

If these two dangers, the tongue falling back and closure of the glottis, be not treated at once, the result is that respiration does not proceed, the blood is improperly aerated, the lungs become gorged, the heart becomes gorged, and the result is, stoppage of the heart's action. If a rabbit be killed with chloroform and the chest opened, the heart will be found to be gorged with blood, and the contractions of the heart will be in abeyance; prick the heart with a needle, allow some blood to escape, and the contractions of the heart are re-established. This experiment seems to show that if, by striking the chest and by artificial respiration the action of the heart be not quickly re-established then bleeding from the external jugular vein should at once be resorted to. I have never yet required to have recourse to this remedy, artificial respiration having been sufficient. It must be remembered that it should never occur unless by a fault on the part of the administrator in not using at once the proper remedies—either removal of the tongue, if it be acting as a mechanical obstacle to the admission of air, or forcible traction of the organ if the obstruction be in the larynx itself in consequence of paralysis of the intrinsic muscles of the organ.

3. *Fainting.* The treatment is preventive and curative.

a. Preventive. Never give chloroform in the sitting posture. Never commence any operation, however trivial, until the patient is fully under the influence of the drug; it is far better not to give chloroform at all than to use it imperfectly.

b. Curative. If it occur as a result of a weak heart, or in consequence of an excessive loss of blood during the operation, or as a coincidence during the administration of the drug, then the head must be at once placed at a lower level than the body, the arms and legs must be raised to the vertical, or the patient may be held up by the heels, as recommended by M. Nélaton. The effect in all these ways is attained of restoring a sufficient supply of blood to the brain.

The good effects of Nélaton's practice are, in my opinion, of a twofold nature; first, by restoring the proper supply of blood to the brain in the most efficient and quickest manner; second, in many of the cases the danger may have been at the opening of the glottis, due to obstruction by the tongue; inverting the patient will at once remedy this by causing the tongue to fall forward. It will also be useful in cases in which blood, in operations about the mouth and nasal cavities, has passed into the bronchi, or in cases in which vomited matter has passed into the larynx, the foreign body being removed by inversion, as Brunel removed the half-sovereign from his bronchial tubes. The frequency with which Nélaton's practice has been attended by good results in cases of apparent death from chloroform, seems to show that inversion may act in this twofold manner, because obstruction of the glottis is a much more frequent danger in the administration of chloroform than faintness, which, as far as my experience shows, is comparatively rare.

4 *Vomiting.* Do not give any solid food for four hours before the operation. In railway accidents and other sudden injuries in which it is necessary to give chloroform, the greatest care must be taken; if vomiting occur during the administration, turn the patient on his side, in order to allow the vomited matter to escape from the mouth, and prevent any regurgitation into the bronchial tubes. In such cases, the administration of chloroform should be abstained from until the stomach is empty.

When the act of vomiting takes place, the stomach being empty, then the administration of more chloroform is required in order to stop the abnormal contractions of the muscular walls of the stomach. There is in such a case no danger from vomited matter passing into the larynx.

The dangers which accompany its abuse and their treatment. If an overdose of chloroform be administered—and it must be remembered that some patients are very susceptible to the action of the drug— the nervous centers which rule the muscles of respiration are poisoned; then the treatment required is to pull the tongue forward, in order to allow air to enter or leave the chest by artificial respiration. It is a volatile poison, and perseverance in artificial respiration must be continued until the volatile poison passes away. A case recorded by Dr. J. J. Brown, in the Edinburgh *Medical Journal* (Nov., 1874) well illustrates this important fact. By artificial respiration, kept up continuously for two hours and three quarters, he saved a patient in whom complete paralysis of the respiratory ganglia had occurred, but the cardiac ganglia were unaffected. The case also shows that the respiratory ganglia are poisoned before the cardiac ganglia. When the overdose is excessive, then the heart's action is interfered with; by artificial respiration, striking the chest-wall with a wet towel, and the use of the galvanic battery, it must, if possible, be restored.

THE CURABILITY OF CONSUMPTION.

In an article on pulmonary phthisis in the *Medical Record*, of the 21st ult., Dr. J. Milner Fothergill, of London, makes the somewhat startling assertion, based on an experience of ten years in a chest-hospital, that the disease is far from being necessarily fatal. Under fairly favorable circumstances, he holds, a rally may be made in the large bulk of cases, which may lead to recovery. This is glad tidings, and a detail of the means through which this consummation may be reached will be eagerly read. It is customary in acquainting the patient of the fact that he has consumption to do so in a tone and manner calculated to shut out from him the faintest ray of hope. Treatment, moreover, is usually undertaken with a view to euthanasia, rather than with a hope to snatch the brand from the burning. If, therefore, Dr. Fothergill has put in our power to tell the consumptive that the odds are in favor of his outliving his disease he will prove to have been one of the greatest of the benefactors of this and succeeding ages. He does not propose anything particularly new in the way of treatment, nor does he vaunt any specific. His common-sense application of means already familiar will, however, commend themselves to the attention of the profession.

The line of attack advised in incipient cases is to improve the general condition, in which improvement the new growth have its share. To check the body expenditure and to increase the body income are our aims. All out-goings must be stopped. This is the first step. If a woman, attend to any leucorrhœa at once. Many a good line of attack has failed, many a woman sunk into her grave who might have been rescued, if only that out-going had been attended to. If the catamenial loss be heavy, put an arresting finger upon it by some ergot, sulphuric acid, and sulphate of magnesia, commencing with this two days before the appearance of the flux, and continuing it during the flow, reverting to the usual treatment on its completion. Then, is there diarrhœa? If so, attend to it. Milk and farinaceous matters are indicated (no meat-broths, no beef-tea—"giving the patient a stone when he asks for bread"—unless some farina be added). Then for medicine some astringent preparation of iron may be given in the day, and a pill of sulphate of copper (gr. $\frac{1}{4}$ –$\frac{1}{2}$) with opium (gr. 1–1$\frac{1}{2}$) at bed-time. If there be both diarrhœa and night-sweats this pill will often "kill two birds with one stone."

If there be night-sweats, arrest them at once, or as soon as may be. Sweat is an excretion, and is highly charged with blood-salts. Consequently, profuse sweats are most exhausting. Check them, and the appetite returns, and between the two the patient does well. Prof. Sidney Ringer, F.R.S., has laid the phthisical world under a deep debt of gratitude by pointing out the potency of belladonna in the matter of hydrosis. The best preparation is atropine, not only because it is tasteless, but because we know exactly what we are doing when using it. But to secure its good effects it must be pushed. Its effects upon the pupil is nothing. Indeed, in a very extensive use of belladonna the pupil has rarely been affected. (The effect upon the pupil is a bug-bear which ought to be buried). Dry throat and dim eyesight are discomforts, but unless severe they need not disturb the treatment. There is a wide gulf between these and any real danger. The very lowest dose is $\frac{1}{75}$ of a grain. If this does not achieve the desired end, then $\frac{1}{50}$. If that is insufficient, then $\frac{1}{25}$. If that fails—which it rarely does—one must begin to look seriously at the case. When this dose is reached, and yet the sweats continue, Dr. F. adopts the plan of an Old New York quack, of which Lewis Sayre told him, viz., to sponge the paper over with hot vinegar ($\frac{1}{2}$ pint) with a teaspoonful of cayenne in it. This is not at all disagreeable, and is effective. If the combined measures fail, the patient's case is hopeless, but his physician's conscience is clear.

Perhaps the patient's rest is broken by cough. Dr. F. recommends the following combination in such cases: Morphine, (gr. $\frac{1}{12}$), atropine (gr. $\frac{1}{75}$,) with pil. galban co. or "pil. al. et myrrh.," as the case may require. This is a pill which has done him yeoman service in his warfare with phthisis. It has found its way into the Brompton Hospital, and more recently into Squire's *Companion to the Pharmacopœia*." It will, he thinks, find its way

before long into every consumption hospital in the world. This action of carbonic acid upon the sweat-glands has led Dr. Lauder Brunton to advocate strychnine (a potent stimulant to the respiratory centre) in the night-sweats of phthisis. No doubt it is useful. Dr. F.'s practice is to give it in the day-medicine. His favorite mixture at the hospital consists of liquor strychnine (4 minims), acid. phosph. dil. (15 minims), tincture capsici (4 minims), in infus gent. (3 dr.), *ter in die.* This forms a capital tonic. Some quinine or sulphate of magnesia (or soda) may be added as required.

One of the rules which have formed themselves in his mind is to give acids when the tongue is clean or coated. When the tongue is bare, raw, or irritable, then alkalines are indicated as am. carb. (g. 2 to 5), tinct. nuc. vom. (10 minims)inf. gent. (1 ounce), *ter in die.*

On such a line of treatment the patient usually improves. The night-sweats cease, the appetite returns, the cachectic look departs, and the patient feels much better. The improvement is maintained, and soon iron and arsenic can be added to the strychnine, and cod-liver oil to the dietary (but cod-liver oil is not the best form of fat, nor yet the most palatable, though it is the most digestible. Some forms of fat in an emulsionized state are now on the market which possess many advantages over cod-liver oil). Iron is a good hæmetic.

Arsenic is an alterative and a tonic greatly believed in by many good observers in lung-consolidation. If the patient can be induced to take fat in any form the healthy tissues can be built up. Very commonly the affected area is found to shrink, and air to pass into it. In a few months, in many cases, it is scarcely possible to detect any change in the lung. The threatened danger has passed away!

All along in the treatment advocated the matter of improving the condition has never been lost sight of for a moment. If the patient can get away to a dry soil and a bracing locality, all the better for him or her.

Another common patient is the person who has chronic phthisis with cavities. Such patient is always spare and badly nourished at the best; and when any intercurrent ailment still further lowers the general condition the lung trouble is aggravated. (And one matter has forced itself upon his attention, viz., that wherever there is old lung-consolidation any disturbance in the liver sets up irritation in this consolidated patch with resultant cough. And this cough, which is intractable to ordinary cough-medicines, is relieved by acting upon the liver.) The appetite has fallen off and the nutrition is impaired; and then the special danger in phthisis is set up. Very often the tongue is raw, or beef-steaky, or patchy. Here attention to the *prime vie* (as our grandfathers phrased it) is imperative. The patient must be sent to bed, to reduce the body expenditure to the minimum. The medicine must be bismuth, with alkalies; and the food, milk with malt extract, or a malt preparation with Mellin's food, in small quantities at a time, oft-repeated. No solid particle in the stomach to vex and irritate the sensitive (because ill-fed) mucous membrane. Even an alkali—like carbonate of magnesia—may be required to neutralize acidity and prevent too firm curdling of the milk: as much as will lay on a sixpence to half pint of milk is usually sufficient. Having got the assimilating processes into good working order, the tonic may be given. "The more haste the less speed" is especially true of the treatment of phthisis; and the desire to push on with tonics and good food sadly too often defeats its own end. Sometimes a masterly inactivity is the wisest practice. A clear head and a firm will are often required to curb the desire of the patient (and still more the patient's friends) to be getting on. Back-cast after back-cast teach a painful lesson to the medical man, and involve the patient in acute danger. If the pressure put on a young medical attendant is becoming more than he can bear, let him call in an older head to help.

The chief thing to avoid is morphia tinctures for the cough. An opiate to procure sleep may be essential and unavoidable; but sedatives in the day are dangerous. They give relief from the cough but too commonly they give permanent relief by death. Opium lays its palsying hand upon the assimilative organs, and destroys the appetite. Its evil effects seem most distinctly felt by the liver. When an opiate is indicated at night it should be combined with ipecac to antagonize its effect upon the liver, and with aloes and myrrh pill to correct its actions upon the bowels. Opium strikes directly at the assimilation which is the cardinal matter in the treatment of phthisis. The patient most certain to die, the case least amenable to any treatment, is that one whose wasting progresses steadily, and where the lungs are only affected quite late on—indeed, a brief while before the final change sets in.

As to other means of allaying the cough than opiates, inhalations of steam are often serviceable. Friar's balsam, iodine, carbolic acid, terepene, eucalyptus, all are good as additions to steam. Where there is a cavity with ragged walls smelling offensively, a respirator with cotton wool charged with carbolic acid is indicated.

Then, as to the other means of feeding the patient, there are inunctions of oil, often of service, especially with young subjects. Nutritious enemata have only lately suggested themselves: but in one case of a medical man steadily wasting an enema of cod-liver oil (emulsionized by a drop of bile) and milk in equal quantities is being tried. Such enema night and morning, while in the recumbent posture, would be readily retained. When the temperature mounts up, and especially when the skin is also moist (the usual state in hectic fever connected with phthisis), Dr. F.'s plan is to give quinine (gr. 2 to 5) with tincture of digitalis (10 to 15 minims) and dilute phosphoric acid (15 minims,) thrice daily. The effect is very satisfac-

tory usually. Where a severe racking cough is present, shaking the poor sufferer terribly, it may be necessary to give opiates; but, in the author's experience, such cough is very rarely found with pulmonary phthisis.

The treatment of haemoptysis is quiet; no movement, no talking. When it arises from the bursting of an aneurismal sac in a cavity, or from an ulcerating process eating into a blood-vessel and opening a communication between the vessel and an open air-tube, syncope alone is likely to arrest it. In congestion of the lung it is often an excellent form of local bleeding. Men of old bled for its relief; now free purgation with mineral salts is in vogue. For small recurrent haemoptyses the best treatment is to keep the bowels open. Ice, ergot, and dilute sulphuric acid may also be tried; probably they will do no harm. It is a bad plan to feed up a case of recurrent hemorrhage; it only fills the vessels rapidly, to end in more bleeding.

Finally, the management of phthisis pulmonalis, whether the less grave or the more serious conditions, is a good test of the knowledge, skill and tact of the practitioner, who must, like a competent soldier, be able alike to plan a campaign or execute a sudden change of front in an emergency. That is, he must be able to lay down a persisting plan of treatment, and promptly change his plan to meet some intercurrent conditions, as haemoptysis or acute gastric disturbance.—*Med. Age.*

THERAPEUTICS OF CHOLERA INFANTUM.

Looking over the mortality-records of children, especially in the larger cities of the moderate and warm zones, with the view of ascertaining the principal etiological factors, the frightful ravages of cholera infantum seem inexplicable in view of its generally acknowledged causative factors. It is apparently in vain that the light of hygienic and sanitary knowledge is persistently, with word and letter, thrown into the dwellings of the poor, the gospel of fresh air and pure water will apparently never enter the crowded tenement-houses, and the high mortality-rate of children during the summer months remains stationary. It is unfair to blame the medical guardians of the community for the meagre results of their curative efforts, as long as even the most ordinary prophylactic measures are systematically ignored, if not ridiculed, by the ignorant portion of the poor public.

We present to our readers in the following a full abstract of a classical essay by Dr. Baginsky, of Berlin, treating of the prophylaxis and therapeutics of cholera infantum.*

The prophylaxis is to begin with the most careful notation of every dyspeptic disturbance during the summer, especially in such children which probably some weeks previously suffered from a dyspeptic catarrh or have just been weaned. The dyspeptic catarrh may or may not be dependent upon dentition, at any rate, it is to be regarded as a serious morbid condition. The foolish view of many mothers, and—it is to be regretted—also of physicians, that diarrhœa in children comes from the teeth, and consequently requires no astringment or any other treatment, slays annually thousands of young children.

If the catarrh, in spite of strict diet and appropriate remedies, cannot be mastered even after a complete change of nutrition, the child is to be sent to the country under careful medical attendance.

The therapeutics of the affection will vary according to the stage of the latter in which the treatment is begun, and may either be the attack itself or the so-called period of reaction.

The treatment of the choleraic paroxysm is intended (*a*) to check the hyper-excretion, (*b*) to revive the cardiac power, and thus protect the system against the danger of collapse. To satisfy both indications is only possible in the beginning; later, during the stage of existing weakness, the second object engages exclusively the medical attendant. The question whether medicines, which, like opium, subdue the violent intestinal peristalsis, are proper, is to be answered in the affirmative, but only conditionally. Opium is for children of a very tender age a highly dangerous drug; its action is often unquestionably favorable, but is surely harmful where it does no good. Its applicability, then, must be determined by the peculiarities of each single case. If the child is very restless, or if constant whining, violent movements, and expressions of pain when the abdomen is touched, point to abdominal colic, opium has to be resorted to, and is best given in combination with an antiferment, such as calomel, iodoform, resorcine, or bismuth. The tincture of opium is to be given in doses of 2 to 3 drops, the extract in correspondingly smaller doses; Dover's powder and hydropathic applications usually act very well. The more quiet and apathic a child is from the beginning, the softer and flabbier the abdomen, the more the diarrhœa, as it were, passes off insensibly, the less appropriate is opium, the greater the danger to hasten the lethal exit through sopor and somnolence.

The antiferments assist likewise the stoppage of the diarrhœa by eliminating the fermentation of the ingested matters which produced the heightened peristalsis. These remedies may also be employed alone without opium; our expectations though, in this case, must be moderate. Astringents, both the metallic and vegetable ones, are decidedly contraindicated during the choleraic attack, though they are very valuable in the secondary catarrhs.

Rectal washes, consisting of large quantities of lukewarm water, are more effective than generally

* This essay forms the third series of Baginsky's work, entitled "Practical Contributions to the Therapeutics of Diseases of Children." The first series treats of pneumonia and pleurisy, the second of rachitis.

understood. If, in spite of all instituted measures of relief, the collapse progresses, the extremities grow cold and the skin pale, the fontanelles recede and the face assumes what is known as the hippocratic expression, medicines intended to stop the diarrhœa are no longer appropriate; true stimulants are then called for. The dietetic means, such as black, strong coffee and alcoholic stimulants (such as cognac, champagne, and genuine port wine), will also revive the flagging vitality. Small quantities are to be administered in short intervals, from a few drops to a teaspoonful, according to the age of the child. Wine is best given by itself, cognac with soda-water (cold), coffee best warm, and only if vomited, cold. Among all eligible medicines camphor, benzoic acid, liquor ammonii anisati or liquor ammonii succinii deserve the preference. The following may be given every two hours in children of ½ to 2 years:

℞ Camphoræ tritæ,
Acidi benzoici, aa 0.03-0.05 grm. (½-¾ grain);
Sacchari lactis, 0.5. grm. (7½ grains).

Or the following:

℞ Liquor. ammonii succinii. 1-2 pts. per 100;
One teaspoonful every half-hour.

Unfortunately, all medicines are very liable to be vomited up in this, and, in fact, in all infantile affections; under these circumstances hypodermic medication should unhesitatingly be resorted to: acetic or sulphuric ether, in doses of 2 to 5 drops, or the tincture of musk recommending itself best. All are well borne, and act, often with surprising promptness, in raising the arterial wave and stimulating the great nervous centres.

During the height of the collapse, marked by diarrhœa and vomiting, food (including even the mother's breast) is of course wholly interdicted. To quench the great existing thirst, seltzer-water, with wine or cognac (cold) or coffee, is to be freely given. Warming bottles are to be placed to the feet and cold compresses every half-hour to the abdomen as long as any algidity is absent. Is it advisable to bathe children during the paroxysm? Some authors praise baths, both cold and warm, though the former are scarcely advisable. Warm baths, especially when combined with chloride of sodium or calamus, are said to be of advantage, though Baginsky has never obtained any palpable benefit from them. The same is true of mustard-poultices and mustard-baths, though both should be tried, as, besides being harmless, they may at least cause a momentary improvement of the child's condition.

The period of reaction requires a novel and equally careful attention to the patient. The condition known as hydrocephaloid is here well to be separated from the so-called typhoid state. Hydrocephaloid manifests itself as a uniformly advancing phase of constitutional failing, and calls for a protracted mildly stimulating treatment. This is best initiated with either the mother's milk or ice-cold cow's milk, or Biedert's food. The child is now to be kept warm by warm compresses to the abdomen and even to the head; internally (in addition to the above-stated excitants) wine or coffee are to be given. Complications, such as bronchial irritation, abscess, or albuminuria, of course require the ordinary special attention.

In the typhoid state of cholera infantum lukewarm baths or lukewarm applications to thorax and abdomen are especially indicated when the respiratory tract has been attacked. Senega and the liquor ammonii anisati will then act much better than ipecac, which is rather apt to heighten the already existing inclination to vomit.

The cornea and conjunctiva usually do not obtain the degree of attention to which these important structures are entitled. The eye is to be repeatedly moistened with lukewarm water or covered with a cloth saturated with greatly diluted chlorine-water.

NOTES OF FOUR CASES OF VARICOSE VEINS TREATED WITH HAMAMELIS.

BY E. F. NICHOLLS, M.D.

In April, 1883, I read in the *Philadelphia Medical Times*, No. 402, an article by Dr. J. H. Musser on "The Treatment of Varicose Veins with Hamamelis." A few days after I read this article, Mrs. W., a married woman, age 35, called at my office on account of swelling and varicose veins of the left leg. On examination, I found the left leg considerably swollen, with here and there large dark spots, which on pressure were quite soft and somewhat tender. These spots were as large as eggs, and situated on the inner aspect of the calf. The right leg was all right. Mrs. W. was three and a half months pregnant with her fourth child. She had always experienced trouble with the veins of her left leg while pregnant, beginning about the third month of pregnancy, and continuing till delivery. In her former pregnancies her leg had been treated by bandaging, which afforded some relief, but her distress was so great that at times she was compelled to seek relief by lying down. I concluded to try the hamamelis and ordered to take one teaspoonful ext. hamamelis four times a day in a wineglassful of water. She began to improve at once, and continued to take the drug till delivered. Her leg gave her no trouble, the swelling and varicose veins disappearing altogether. Mrs. W. is again pregnant, and the varicose veins appeared again at the usual time. She is now taking hamamelis with success.

The second case is a young colored man, age 30; has had varicose veins for two years. He got some relief from bandaging, but relief was only temporary. Last November he came to my office with a ruptured vein, considerable oozing of blood. Put on a compress and ordered hamamelis, teaspoonful every three hours. Saw him next day, took off compress, no bleeding. Con-

tinued hamamelis. Did not see him again for two months, when he reported at my office well. Have seen him several times since, and he has no return of his varicose veins.

The third case was a woman, age 50 years; was a washerwoman; had had varicose veins for a long time; did not remember when they first came; was treated by adhesive strips and bandage, but always returned after the bandages were left off for a short time. I gave her hamamelis, two teaspoonfuls three times a day in water. She got entirely well in two months, and has remained so ever since.

The fourth case, a woman, age 47 years, sent for me May 10, 1883. I found her sitting in a chair, bent forward till her face was between her knees, her hands clasped firmly together, her legs stuck out in front, covered with wet cloths. I do not think I ever saw in my life such a picture of utter hopelessness as this patient. When I approached her, she looked up, and in the most piteous voice exclaimed, "For God's sake, can you do anything for me?" On examining her legs, I found the cause of all her troubles: both legs were a mass of ulcers from the knees to the ankles. From ulcers was oozing a clear fluid, which soon turned the cloths black. Situated a little behind the knee were several bunches of varicose veins. I thought I had found the original trouble. On inquiry, she said at first, some five years ago, her leg was full of large veins and considerably swelled, and the ulcers came afterwards. I put her on extract of hamamelis, a teaspoonful every three hours, and told her to keep cloths wet with hamamelis applied to the leg. She recovered in two months and all she has left to remind her of her former trouble is considerable discoloration on the anterior aspect of her legs. She walks all about the city, experiencing no trouble whatever.

The extract of hamamelis used in all my cases was procured at Bullock & Crenshaw's.

In conclusion, I would say that I consider hamamelis almost a specific in varicose veins from almost any cause. I did not find it disagree in any way with my patients. It is not at all unpleasant to the taste.—*Philadelphia Medical Times.*

A CASE OF OBSTINATE HICCOUGH RELIEVED BY NITRO-GLYCERIN.

Dr. O. T. Schultz reports in the *American Practitioner* for September, 1885, a case of a miller, aged 58, affected with fibroid phthisis, in whom the severity of the cough had apparently brought on several very violent attacks of angina pectoris. The attacks had been rapidly relieved by morphine. During the excessive heat of the last weeks of July, hiccough set in, which continued with moderate severity for three days before Dr. Schultz was called in. Chloroform administered internally gave temporary relief but at the end of two days his seizures had increased in number and severity, and were attended by occasional attacks of dyspnœa. Morphine and atropine only produced relief when the narcotic action was at its height, while it gave rise to a condition resembling alcoholic intoxication, to sleeplessness, and to an increase of the chronic gastric catarrh which also complicated the case. On the sixth day strychnine was given, and the morphine limited to half a grain at bedtime. On the eighth day, there being no improvement, electricity was added. Galvanization of the phrenics and of the epigastric region gave no relief. A powerful induced current applied to the epigastrium and along the costal region of the diaphragm broke up the spasms after five minutes. There was complete absence of hiccough for half an hour after each sitting, the attacks being less violent and less long in the intervals between the *seances*. Improvement, however, did not last long. On the ninth day potassium bromid., gr. xxx, and strychnine, gr. 1-80, were given every third hour. Only very transient relief was afforded by this combination, the hiccough being not quite so severe for a short time after the prescription had been taken. The next night was almost one constant hiccough, and on the morning of the tenth day the induced current failed to interrupt the attacks.

The patient's condition now became very critical. There was only very rarely a cessation of the spasms, day and night. The appetite had improved since stopping the morphine, but the food taken was ejected as soon as it was swallowed. There was exquisite tenderness along the line of attachment of the diaphragm, and soreness and burning in the whole chest. When he coughed, long and distressing spasms of the thoracic respiratory muscles would set in. He was worn out, and entirely despondent. The temperature was normal and the pulse 100. The bowels were kept freely open with calomel, senna and salts.

Thinking that the causes which had given rise to the former attacks of angina pectoris might be identical with those which originated and kept up the present singultus, and knowing what an excellent remedy nitro-glycerin is for the former form of spasm, Dr. Schultz concluded to try this drug in the case. One drop of a one per cent. solution was given at 8 A.M. of the tenth day, and repeated at 9 A.M. A moderate degree of bursting headache set in immediately on swallowing the dose, the hiccough became easier and rarer, and by 9.30 o'clock had ceased entirely. The medicine was continued every two hours. At 2 P.M., after drinking a glass of iced milk, the spasms again appeared, but yielded quickly to a new dose. During the afternoon and the night there was only an occasional hiccough, but on the eleventh day a short attack appeared at 2 and 6 P.M. The medicine was steadily continued. The spasmodic movements now ceased entirely. On the twelfth day an occasional dose of the nitro glycerin was exhibited and a tonic of iron, muriatic acid, quinine, and nux vomica begun; on the next day the former was dropped entirely.

FOTHERGILL ON HEPATIC DISORDERS.

The functions of the liver and kidneys are closely linked together; and in those derangements where the urine has a thick sediment and the bowels are disordered, the old-fashioned doctor who shook his head and oracularly uttered, "Liver!" was not such a fool as it has recently been the rule to regard him. First cut down the amount of albuminoids eaten or drank, in order to reduce the demand upon the liver; then sweep away the waste from the blood by a pill at bedtime:

Pulv. pip. nig	grs. ij.
Pil. col. comp	grs.

and in the morning:

Sodæ pot. tart	ʒ j.
Sodæ sulphatis	ʒ ss.
Tinct. zingiberis	ʒ ss.
Inf. gentian	ʒ j.

with an equal quantity of boiling water, so as to make the draught as hot as can comfortably be borne. Let this be done twice or thrice a week, till the tongue is clean. When that is done, give the

Sodæ sulphat	ʒ j
Sod. et pot. tart	ʒ ss.
Tinct. nuc. vom	gtt. vj.
Inf. cascarillæ	ʒ j.

Ter in die before meals, and the pill twice a week.

If there be general asthenia, do not proceed to give iron until the tongue is thoroughly clean, the water clear, and the appetite good; and then commence with two or three drops of the dialyzed iron once a day, after food. In other cases, where there is only slight constipation, with deposits in the urine, especially after meals, give the old-fashioned dinner pill:

Pulv. ipecac	grs. j.
Pulv. capsici	grs. ss.
Ext. cinchonæ	grs. iij.
Pil. a. et myrrh	grs. j.

every day after dinner. It will be found very efficacious. If this dinner pill does not act sufficiently, give the morning laxative twice or thrice a week, so long as the bowels require it. Then as to the union of laxatives with tonics, it is well often to combine these two agents. In convalescence, tonics never act genially, if there be not at the same time time regular and sufficient action of the bowels; so, and sulphate of magnesia or sulphate of soda to the tonic.—

Mag. sulphate	grs. xx.
vel soda sulpha	ʒ j.
Quin. sulph	grs. j.
Ac. phosp., dil	m. xv.
Inf. gentian	ʒ j.

Ter in die before meals, and ten minims of dialyzed iron after dinner, daily, will usually give good results; or,

Mag. sulphat	ʒ j.
Tinct. fer. mur	m. x.
Liq. strychnia	m. iv.
Inf. quass	ʒ j.

Ter in die: forms a less expensive tonic, of much utility.

But in this use of laxatives, with occasional mercurials, avoid the pitfall of letting the patient eat with unlicensed abandon.

Now, in conclusion, let me tell the student to strive to see what are the indications for treatment what in this case, calls most imperiously for attention. He is taught too exclusively, at present, to look at disease from a deadhouse point of view. To make a diagnosis which would be corroborated in the deadhouse is the great matter! Yes, so it is at a medical school; but in practice for yourself, remember that a living, grateful patient, who has got well under your care, is worth far, far more to you than any amount of accurate diagnosis—which, so far as other persons and their opinions are concerned, is as voiceless to further your interests as the tombstones in the churchyard which mark your failures.—*Indian Med. Jour.*

ON THE THERAPEUTIC VALUE OF THE CHLORIDE OF CALCIUM.

Dr. R. W. Crighton, M. D., England, writes in *Practitioner*, concerning the chloride of calcium in the following positive terms:

In suitable cases I know of no other therapeutic agent that will produce the same good results. And, among these, first in glandular enlargements of the neck in children, where the glands seem massed together, and are almost of stony hardness, and in which both iodine and cod-liver oil have failed to reduce the bulk.

After some weeks' patient use of the chloride, with careful attention to diet and general hygiene, there seldom fail to be noticed a softening and separation of the individual glands, and generally, in a few months, such a reduction in size, or complete disappearance in milder cases, as to warrant the term *cure* being applied to the case. On the discontinuance of the remedy, however, an increase of size often takes place, necessitating its continuance at intervals for a year or more.

I have found the chloride of calcium equally efficacious in cases where suppuration had occurred—in fact, one of the earliest cases which I treated thus was that of a lady aged forty, who, from childhood, had scarcely ever been many months free from suppuration of some of the cervical glands. These had generally been incised, and cod-liver oil and the preparations of iodine almost constantly taken. She had been under my care for several years with this unsatisfactory result, when, in May, 1878, she was treated with doses of chloride of calcium thrice daily. In less than three months all suppuration had ceased, and the enlarged glands had become much reduced in size. I ordered her to continue the medicine at intervals; and, much to my delight, learned from her several years afterward, when attending her for some abdominal affection, that there had been

no suppuration in the interval, and that, on observing any increase in size of the neck, she invariably had recourse to it. In cabot's mesenterica the good effects are striking and lasting, if the disease is not too far advanced.

In pulmonary phthisis I have not found the chloride so useful as I had been led to expect from the reports of Drs. Wood, Sanders, and others, and should recommend its employment in those cases only where there is evidence of the bronchial glands being decidedly enlarged.

In scrofulous caries I have witnessed quite as remarkable results from the prolonged use of the remedy as in scrofulous enlargements of cervical and other glands.

Valuable as iodine and cod-liver oil are in many cases of the large class of diseases comprehended in the term "scrofulous diathesis," I yet claim for the chloride of calcium, in certain instances, a special therapeutic power which neither of them possesses, and, in all cases of this diathesis, the merit of a valuable *alternative* remedy.

I prescribe the crystallized chloride of calcium, as the anhydrous salt forms a turbid solution and has an unpleasant taste. The recognized dose is from ten to twenty grains, or even more; but I have generally given a smaller one—one, two, or three grains for young children, and rarely over twelve or fifteen for adults. The formula is five ounces of the crystallized salt in fluid twelve ounces of syrup. The dose of this solution has varied from minims v to minims xl, according to age and other circumstances. I give it in milk after meals.

IODISED PHENOL IN THE TREATMENT OF WHOOPING COUGH.

Rothe (*Memorabilien*) announces his continued satisfaction with carbolic acid as a remedy for whooping-cough, after fifteen years' experience with it. The formula employed is as follows:

Carbolic acid, Alcohol,	each.....	7½ grains.
Tincture of iodine.....		5 drops.
Peppermint water.....		750 grains.
Tincture of belladonna		15 "
Syrup of diacodium.....		150 "

A teaspoonful is to be given every two hours, the administration being continued until the paroxysms entirely disappear.

Asthma.—

Tinct. lobellia.....	oz. j.
Ammon. iodidi.....	dr. ij.
Ammon. bromidi.....	dr. iij.
Syr. tolu	oz. iij.

M. Sig.—A teaspoonful every one, two, three or four hours.

Dr. Bartholow says the above gives relief in a few minutes, and sometimes the relief is permanent.

Sulphocarbolate of Ammonia is highly recommended by Dr. Winnermark, of the *New York Record*. For a child of twelve years he gives one teaspoonful of the fluid extract, t. i. d.

Cough Mixture.—(Cook County Hospital, Chicago.)

Morphiæ sulph	gr. i.
Tr. aconite	gtt. xvi.
Potass. nitrate.....	dr. j.
Acid hydrobrom., dil.....	gtt. xvi.
Syr. ipecac	dr. ij.
Syr. scillæ.....	dr. vi.
Water.....	q. s. ad. oz. ij.

Teaspoonful every three or four hours.

Chronic Dysentery.—(*Ibid.*)

Morphiæ sulph	gr. j
Ferri sulph.....	gr. xvi.
Sulph. acid. dil.....	dr. ss.
Magnesiæ sulph	oz. ss.
Water	q. s. ad. oz. ij.

Sage's Catarrh Remedy.—

R. Hydrastis canadensis.....	grs. v.
Indigo.....	grs. ss.
Camphoræ pulv.	
Acid. carbolic.....	*aa* grs. ij.
Sodii chlorid	gis. I.

Powder the camphor by means of a drop of alcohol, and mix with the salt previously reduced to a moderately fine powder; rub the indigo and carbolic acid together, mix with the salt and camphor, and lastly add the powdered hydrastis, and intimately mix, without much pressure, in a mortar. —*Chicago Med. Times.*

THE TREATMENT OF ACUTE LARYNGITIS.

Dr. John M. Keating tells us in the *Archives of Pediatrics* that he has frequently found the following treatment very efficacious:

"In conjunction with a hot foot-bath, the temperature of the water as hot as the hand can bear with comfort, and the feet afterwards wrapped in flannel or Canton-flannel night-drawers with the feet of extra length, and sewed up at the extremities, he prescribes the following in a half tumblerful of water: Rx. Tinct. aconi. rad. gtt. iij.; spts. ætheris nit. dulc., ʒj; syr. scillæ co., ʒj. This is given in frequently-repeated dessert spoonful doses throughout the night. A soft handkerchief wrung with ice-cold water and surrounded by a silk one or a piece of flannel is applied.

If the cough continues, and becomes bronchial it is well to produce a certain amount of counter-irritation of the chest. Ordinary camphorated oil is about the best. In addition to the ipecac, we should recommend small doses of castor oil, the object being to relieve the congestion of the bronchial mucous membrane by acting on the intestinal mucous membrane."

BRIEF NOTES ON THE TREATMENT OF ACUTE CORYZA.

By Solomon Solis-Cohen, A.M, M D.

Chief Clinical Assistant, Out-patient Laryngological Department, Jefferson Medical College Hospital. Read before the Philadelphia Laryngological Society.

It is related of a celebrated French physician that, when asked how he treated a cold in the head, he replied, "With contempt." That some colds may be safely treated in this manner, universal experience will testify. That many attacks of acute coryza cause pain and distress sufficient to demand the best efforts of the physician for their relief must be not alone within the observation, but among the personal experiences of all. The writer has had occasion to test the methods here related upon his own person, and can, therefore, speak with a realizing sense of the relief afforded from annoying symptoms. The property possessed by belladonna, of checking secretion from mucous surfaces, long ago suggested the employment of this drug in acute coryza. I have however, been unable to find any reference to it in the treatises of Mackenzie or Bosworth, the most recent works published in the vernacular upon the special subject of diseases of the upper air passages.

Dr. Beverley Robinson,* of New York, speaks highly of the local use of a powder of belladonna leaves, morphine sulphate, and acacia, but does not mention the internal administration of the drug. J. Solis-Cohen † alludes favorably to the use of the tincture of belladonna in doses of twenty minims. M. Gentilhomme ‡ reports that he has succeeded in arresting the disease in several bad cases, attended with abundant secretion, fever, and embarrassment of respiration, by the use of atropine sulphate in doses of one-half milligrame given at the commencement of the inflammatory period. My own experience with atropine has been equally fortunate. It must be given early in the attack, and when so given is veritably abortive in nine cases out of ten. I have tried several methods of administration, employing granules and triturates of $\frac{1}{150}$ gr. and $\frac{1}{125}$ gr., and a solution of one grain of the salt to the ounce of water, of which the usual dose is four minims (gr. $\frac{1}{125}$). The latter method is preferable with patients upon whose discretion we can fully rely, and to whom we feel no hesitation in entrusting a prescription for a poisonous drug. With other individuals it is safer practice to hand the patient three or four triturates or granules of the dose desired, writing explicit directions as to their use upon the envelope containing them. The manner of using the remedy which has proved most efficacious is to administer $\frac{1}{150}$ grain at the first interview (if this be on the first or second day of the attack), and to repeat the dose in four hours, provided there be no dryness of the throat. The rule for the third dose is the same; dryness of the throat or dilatation of the pupils being the indication to stop the remedy.

When a case is seen during the first twenty-four hours, two doses will often bring the affection under such complete control that the patient does not resort to any further medication. Secretion of thick, yellowish mucus, requiring the occasional use of handkerchief, will, however, usually persist for about a week, but there is, ordinarily, no embarrassment to breathing. Sometimes it is necessary to repeat the dosage in the same manner on the following day, the indication being renewal of watery discharge, suffusion of the eyes, and more or less "stuffiness" of the nose. In order to secure the full therapeutic benefit of the atropine in severe cases, it must be pushed until the physiological effect is produced; that is, dryness of the throat and dilatation of the pupil. One patient complained of the former symptom, that it was worse than the disease. In one case, $\frac{1}{18}$ gr. of pilocarpine hydrochlorate was administered by the mouth, with the effect of relieving the unpleasant sensations. Ordinarily, however, the dryness is readily overcome by allowing a few pellets of ice to melt in the mouth, or by rinsing the mouth from time to time with cold water.

More recently the effect of cocaine in emptying the engorged venous sinuses of the nasal mucous membrane, first prominently called to professional attention by Dr. Bosworth, * has led to its employment in the treatment of acute coryza. While the relief is almost immediate, even in cases where there has been great obstruction to breathing, the effect passes away in from two to three hours, and the drug is too expensive to * use as often as may be necessary. I have found the fluid extract of erythroxylon to be equally efficacious, if instilled into the nose in sufficient quantity. The alcohol of the fluid extract is, however, objectionable, producing considerable smarting. An effusion can be made of equal strength † by the addition of a small quantity of glycerine, and by this means we get rid of all unpleasant effects not inseparable from the drug. The employment of a preparation of coca will give excellent results in connection with the atropine treatment. The patient is given a glass "dropper" slightly curved at the end, such as is used by oculists, and instructed to flood the nose with the infusion of coca whenever it becomes "stopped up." He is directed to draw the medicine back into the throat, in order to make sure of reaching the posterior ends of the turbinated bodies.

* A Practical Treatise on Nasal Catarrh, New York, 1880, p. 600.

† Diseases of the Throat and Nasal Passages. Second Edition. New York, 1879, page 336.

‡ *Union Medicale*, September 4, 1883; *Medical and Surgical Reporter*, December 15, 1883, p. 660.

* *Medical Record* (New York) November 15th, 1884.

* This objection, in the interval between the reading and the publication of this paper, has been obviated.

† Mr. Stedem, of Philadelphia, makes an infusion of coca, two grains to the minim. I am indebted to Dr. Jurist for a specimen of this preparation.

While not denying the advantage of the good old methods of treating acute coryza with Dover's powder, foot-baths, etc., I am convinced that the plan above described, namely, small doses of atropine pushed to the point of physiological effect, with local use of cocaine or infusion of coca, will be found the most convenient and effective for the majority of cases. Like everything else, even quinine, it will sometimes fail. In one case of acute coryza I tried pilocarpine, producing but slight perspiration, but apparently curing the cold. As my experience is limited to this one case, which may be an example of *post hoc*, and not *propter hoc*, I do not claim anything for the treatment. In all cases, however treated, a brisk saline cathartic administered at the outset is found of the greatest advantage.

Where cases are seen too late to employ atropine with advantage, good results have sometimes been obtained from ammonium salicylate in doses of ten to fifteen grains, repeated every second hour until *tinnitus aurium* is produced. Salicin Salicylic acid, and sodium salicylate have not seemed to be equally efficacious with the ammonium salt.

In a few cases of influenza, in which the coryza, has been quite severe, in some of which there has been much conjunctival distress, and in all of which headache and lassitude have been marked, though the febrile symptoms have been mild, cinchonidine salicylate has apparently been of great benefit, while the infusion of erythroxylon has been of inestimable value in relieving the distress occasioned by the nasal symptoms.—*College and Clin. Record.*

THE ELEMENTS OF PROGNOSIS IN BRIGHT'S DISEASE.

Dr. Austin Flint read a paper with this title before the Medical Society of the County of New York (*N. Y. Med. Jour.*, December 5). In the popular mind the name Bright's disease at the present time had a prophetic import not unlike that of a verdict of conviction after a trial for life. It was regarded as a hopelessly fatal malady. This prevailing impression reflected the views of the medical profession, that a fatal termination would invariably take place, sooner or later. This view accorded with our pathological knowledge and clinical experience. But the scope of prognosis was not limited to recovery from the disease. A disease might involve more or less irremediable damage to important organs, but, after having progressed to a certain extent, the damage might not become greater, and the remaining healthy portion of organs might be sufficient for all purposes of life and a perfect state of health. Again, a disease might be progressive, but so slow as not to be opposed to long life and general good health. But in chronic disease the danger to health might depend upon associated affections, or chronic disease might be tolerated, provided the conditions were favorable; otherwise it would prove fatal. Was the disease acute or chronic? Assuming the existence of acute Bright's disease, experience taught that, exclusive of the important concomitant affections, it did not end fatally as a rule, and did not result in any permanent renal lesion. In other words, the acute was not followed by the chronic disease; but exceptionally it ended fatally or in the chronic form. In some cases the acute disease was not marked; it continued for some time and ended in recovery. Here he would substitute for the word acute, subacute. In some cases the question would arise, whether the disease was subacute or chronic; and the diagnosis could only be definitely settled in favor of the subacute form by the disappearance of every evidence of renal disease after some weeks, and the recovery of health.

The author then considered some of the elements of prognosis in cases of chronic Bright's disease. What were some of the conditions requisite for latency? 1. The kidneys must not be damaged beyond a certain degree. 2. The important organs of the body, other than the kidneys, must be capable of performing their respective functions satisfactorily. 3. The laws of health relating to alimentation, exercise, etc., must be observed. Suppose these conditions to be fulfilled, and a lesion of the kidneys to exist which diminished their functional ability one-half, and the disease was not progressive; life and health would be compatible with the existence of chronic Bright's disease for an indefinite period. In order that chronic Bright's disease should be well tolerated, the treatment should relate to accessory conditions required for bringing about toleration, those conditions relating to other organs of the body and to general hygiene. The kidneys in this condition were incapable of meeting an additional demand on their functions. Should the patient fail to observe the accessory conditions mentioned, the inefficiency of the kidneys would become manifest in headache, misty vision, nausea in the morning, impairment of the appetite, and general debility. Examine the urine in such a case, and evidence would be found of chronic Bright's disease which had probably existed for years, the progress of the renal affection at length rendering the organs incapable of performing their functions properly, which caused attention to be directed to the state of the kidneys. It was important, in determining whether the kidneys eliminated excrementitious matters sufficiently not to endanger the health, to make a thorough examination of the urine, not alone with regard to the presence of albumen and casts, but also as to the amount of urine eliminated daily, its specific gravity, and the proportion of the salts. The quantity of the urine might be increased while the specific gravity was so low as to involve great danger from uræmic toxæmia. Suppose the examination of the urine in a case of chronic Bright's disease showed renal adequacy; how should that fact influence the treatment? In this way, that diuretics, sudorific and hydra-

gogue cathartics, would not be indicated; indeed inasmuch as their influence was debilitating and opposed to the accessory conditions for health just mentioned, they were contra-indicated. Was the degree of renal adequacy, as determined by an examination of the urine, reliable in judging of the absence of danger from toxæmia? This question was to be answered in the negative. In some cases of Bright's disease the quantity of the urine was decreased for a long period without serious consequences. The explanation lay in the fact that the excrementitious matter was eliminated vicariously, or its effects upon the system were counteracted by other agents. On the other hand, slight inadequacy, without vicarious elimination and counteracting agents, sometimes led to serious consequences. The prognosis after coma was always grave, yet we meet with cases repeatedly in which life was preserved for a long time. Of acute pulmonary œdema the same might be said as of uræmic coma. In his experience the most serious consequence of Bright's disease was dyspnœa, or renal asthma, apparently due to toxic effects upon the respiratory center. He had never known such a case to end in recovery, but he had known life to be prolonged for several years after dyspnœa from pulmonary œdema occurring in the course of chronic Bright's disease.

Recapitulating, Dr. Flint said that subacute diffuse nephritis, having the same seat and characters as acute Bright's disease, exclusive of acuteness, occurred not only after scarlet fever and other fevers, but irrespective of these; and when it occurred as a primary affection, or in connection with other diseases, it was liable to be overlooked, or, if recognized, to be mistaken for the chronic form. Further, acute or subacute diffuse nephritis not infrequently occurred as an intercurrent affection in the course of chronic Bright's disease, and rendered the prognosis temporarily more serious. The disappearance of symptoms and the presence of health did not necessarily indicate that the chronic disease was not still in existence. Again, a susceptibility to the causes of inflammation of the urineferous tubules, irrespective of the existence of chronic Bright's disease, was to be recognized as an individual peculiarity.

TREATMENT OF ABORTION AT THE FOURTH OR FIFTH MONTH, WITH RETAINED PLACENTA.

Dr. G. R. Southwick of Boston, (in the *Am. Jour. Obs.*) gives us a very interesting paper on this subject in which he points out the change in the medical fraternity during the last few years on this subject from the expectant treatment to the radical plan of dilating the cervix and removing the secundines immediately, and very pertinently puts the query as to whether or not the pendulum of progress might not have swung too far to the opposite side from the old but easy expectant idea. He says when the labor takes place at full term the uterus contracts away from the placenta, which is a more contractile body, and thus separation takes place. The uterine muscular tissue continuing in this contracted state constricts the sinuses and hemorrhage is prevented. Thrombi form back of these constrictions and when the uterus partially relaxes in twenty-four hours, serve to plug the vessels and in turn also prevent hemorrhage. But when abortion takes place in the middle of gestation, the muscular tissue of the uterus has not reached that degree of development, and becomes ready for the metamorphosis which takes place at full term. The surface contraction is less in proportion, *i. e.*, there is less contraction to the square inch of surface, and consequently separation of the placenta is less likely to follow, both for this reason and on account of its firm attachment. Thrombi therefore do not form so rapidly, and hemorrhage is liable to ensue though not so severe as under similar circumstance at term.

In some rare cases small portions of adherent placenta become organized and a fibroid polypus hydatidiform mole develops. In nature's method of removal the blood-vessels are closed behind the adherent portions, the placental tissue gradually disintegrates and is cast off; here another element must be considered—the danger of septicemia.

Retention of a part or the whole of the placenta is, therefore, liable to give rise to one of the following complications:

1. Hemorrhage, either immediately and profuse or remote, and become continuous in small quantities.
2. Septicemia.
3. Some intra-uterine growth.

The aim of treatment is to prevent or forestall them, and may be active or conservative. Active treatment consists in the immediate removal of the secundines in every case, either by the finger, placental forceps, or curette. There is good reason to fear the results of traumatism, as inflammation of the uterus and cellular tissue, or even perforation of the uterus, especially when performed by an unskillful hand, which is not infrequently the case. Very often the removal of placental tissue is tedious and accompanied with considerable hemorrhage.

If no urgent symptoms be present the Doctor thinks it is well to see what conservative treatment will do, or plug the vagina for a few hours, and often on removal of the tampon the retained secundines are easily delivered.

It sounds very easy to read that, to remove the placenta, the uterus is to be pressed down in the pelvis with one hand externally while the forefinger of the other enters the uterine cavity, passes up over one side of the placenta and down on the other so as to hook it down and extract it from the uterus, but it is a very different thing to do it.

The pelvic tissues being tender and painful, the abdominal walls being quite thick, the uterus being high up, and the os contracted and small, the operator's fingers being short, or, when the uterine cavity is reached, the attached placental tissue

being high up in one horn of the uterus, extremely slippery and persists in gliding from beneath the finger, and yet does not come away, any or all of these complications, soon exhaust the Doctor's strength, the patient's good nature and forbearance, and lays the foundation for pelvic inflammation, besides endangering the patient to the introduction of septic germs during the process of this manipulation.

But if any of the three complications mentioned above should ensue, then of course there would be no alternative other than active interference and emptying the uterine cavity.

To prevent hemorrhage he suggests the tampon as temporary means, as, after the most careful plugging, the plug becomes compressed and blood escapes around it as before. It is important to remember that no portion of the tampon should protrude between the labia, as it would almost certainly be forced out by muscular action. The plug may extend into the cervix. It serves the double purpose of promoting uterine contractions and expulsion of the secundines, as well as temporary control of hemorrhage; and avoids the necessity of radical measures unless symptoms of sepsis ensue.

The next danger, and the most to be dreaded, is septicemia. As this most probably is a result of the introduction of septic germs from without in some manner, by the hands, or instruments or air, it goes without saying that the physician should never attend such cases immediately after visiting a case of scarlatina or other zymotic diseases without the most rigid antiseptic precautions. When symptoms of septic infection present themselves, they should be treated the same as septic fever from any other origin; rigid cleanliness by intra-uterine douche, control of temperature, etc.

The third complication is so rare it only needs to be referred to as a sequela and treated as an independant subsequent incident, when menorrhagia and metrorrhagia require the use of the curette, placental forceps or sometimes the ecraseur.

ON SOME NEW MEDICAMENTS.

At the recent meeting of the Society of the Medical Staff of the Royal Charité Hospital, Prof. Senator gave a summary of newly-discovered medicaments, reported in the *Berl. Klin. Wochenschrift*. He drew a comparison between the innumerable medicines as such and their value as medicaments, and pointed out that, although the advance made with regard to specific medicines for directly curing diseases was small, yet great progress has been made with regard to those which act symptomatically. This, he said, was of great value, for by their means the pains of many incurable diseases can now be diminished, and troublesome and threatening symptoms in curable diseases can be prevented or removed. Dr. Senator then gave a brief account of his own experiences of some exotic medicaments, that have as yet received little attention in Germany. Of purgatives, he mentioned tincture of cascara sagrada, euonymin, and trisin. The tincture of cascara sagrada he considers a non irritant and very certain remedy. One great advantage it possesses is that it can be taken for a long time without dis advantage. Dr. Senator prefers it to senna, because it is effective in smaller doses. With regard to euonymin, Dr. Senator refers to Ruther ford's valuable experiments on its physiological effects, and mentions that it is used both as an aperient and as a cholagogue; but as a cholagogue he says it is difficult to form an opinion. At any rate, it is a certain and very drastic remedy, and for this reason cannot be taken continuously for a long period. From his own experience, Dr. Senator said he had nothing to communicate about trisin, but he considered there was not much reason for introducing it. He then mentioned two narcotics, extract of piscidia erythrina and hydrochlorate of cocaine. The extract of piscidia erythrina, recommended since 1845 in America as soporific, he has found very useful for neuralgic pains in the head, given in an evening in doses of about four and a half to eight grains. Hydrochlorate of cocaine he had applied with success to the mucous membrane of the urethra and the rectum, especially in connection with diseases of the bladder. As a remedy against the immoderate perspiration of phthisical patients, Senator mentioned picrotoxin, which he tried on the recommendation of Dr. W. Murrell. He had tried it in forty cases, in two-thirds of them with success. On the whole it was found to be almost as certain a remedy, as atropin or agaricin. Agaricin was used in the Giessen clinic as a substitute for atropin in 1883, and found to be preferable to the latter in this respect, that it could be used for a longer time.

HOW TO TREAT WOUNDS OF THE FINGERS.

Every physician, no doubt, feels satisfied that he knows perfectly well how to treat finger wounds, yet Dr. John Kent Spender seems to think that he knows enough original about the subject to warrant him in publishing an article in the *British Medico-Chirurgical Journal* for June. He believes in properly dressing such wounds, and then *letting them alone*, and the prime element in his proper dressing is the *absolute exclusion* of air. To illustrate his method, he relates the case of a man whose third and little fingers were cut by machinery; the last phalanx of the third finger was almost separated. The flow of blood was checked with circular pledgets of lint; next he fastened the arm and hand to a board, and suspended the whole limb in a sling; and the last step of these preliminary proceedings was to send the patient home to recover from the shock, with the help of warm food and a little sleep. Four

hours afterwards he visited him, and dressed the injured fingers in the following way:

Firstly, the pledgets of lint, stiffened with dry blood, were soaked in water and gently removed. No foreign body of any kind was found. The fingers were thoroughly cleansed, the nearly separated portions were brought into juxtaposition and retained *in situ* while a circlet of boric lint was applied. Each finger was laid upon a bed of absorbent cotton-wool tissue, which just met on the dorsal side; then a lilliputian bandage of thin, soft calico was put around, with moderate pressure, and the turns of bandage were brushed over with the gum acacia mucilage of the British Pharmacopœia. Finally, each finger was put into a cradle of gummed paper, which was moulded while soft, and then dried in the gradual heat of an oven. These light and simple shields kept the fingers apart, and guarded them from further accident.

The wounded fingers were not undressed until eleven days had elapsed from the date of the accident; and when exposed to view the healing was found to be complete, and the fingers were of their natural size (though of course a little shorter than before the injury). The tender cicatrices were protected for a few more days with ordinary plaster, and the work was finished.—*Med. and Surg. Rep.*

CANCER OF THE UTERUS.

The following is taken from a clinical lecture by William Goodell, M.D., published in the *Medical Bulletin*, August, 1885. The patient was thirty-nine years of age, and had five children, the youngest eleven years of age.

There are three forms of cancer which may attack the uterus: scirrhus, epithelioma, and encephaloid, but there is no doubt that they merge one into the other. The practical question is not so much, is the tumor scirrhus, epithelioma, or encephaloid cancer, as it is a question whether or not the growth is malignant. There is only one thing about this differentiation, and that is that epithelioma is more amenable to treatment than either of the other forms. In the vast majority of cases when cancer attacks the uterus it takes the form of epithelioma. There are some cases which seem to begin as scirrhus, and ultimately break down into the epithelial form.

There are certain popular fallacies about cancer of the uterus. One is that it is always accompanied with pain. Carcinoma of the neck of the womb does not always produce more pain than most women experience at each period. It is only when the disease advances toward the internal os that pain is felt. When it ascends and invades the cavity of the womb the woman's sufferings are very great. You see in our practice in the dispensary the same thing. We hook tenacula into the cervix and apply powerful causties without eliciting any sign of pain. Under some circumstances, just as cartilage, which is normally insensible, may become excessively tender, so the cervix of the womb will, under certain circumstances, become very sensitive, and the slightest touch will cause the patient to flinch; but, as a rule, in cancer limited to the neck of the womb there is no pain. There may be leucorrhœa and that will certainly be if there is an open sore. This is a very common delusion. Old physicians have said to me, "O, no, doctor, it cannot be a cancer, there has been no pain." The idea of cancer is associated in their minds with lancinating pain, which cuts like a knife. When carcinoma invades external portions of the body which are well supplied with nerves, these pains are present. The sensitive portion of the womb begins at the internal os, and the lining membrane is very sensitive.

Another fallacy is that there is, in every instance, the cancerous cachexia. This is a great mistake. My impression is that one-half of the cases which come to me do not present the cancerous cachexia. Instead of being lean, bony, and scrawny, with the leaden hue of the countenance, many of these cases present a buxom appearance, with rosy cheeks. It is my experience that such cases are less amenable to treatment, and operation is less liable to be followed by temporary benefit, than in those cases which present the appearance of the patient before us. In our patient, if the disease were limited to the cervix, I should expect that the operation would do a great deal of good.

Again, cancer may exist without bleeding. Before ulceration occurs it is not present, and even in the vegetating form it may be absent, although there is usually some discharge. This discharge need not be offensive, and this is another point which it is well to bear in mind.

I wish now to give you a little history of this case. She comes from a distance, and was brought here by her husband in great distress of mind. She had been told that she had a cancer. My own rule, to which exceptions are very rare, is never to tell a woman that she has a cancer. I speak of it as a bad ulceration. Many of my patients have known in their hearts that they have a cancer, and know that I know it, and yet the word "cancer" never passes our lips. Many women say to me, "Now, Doctor, if I have a cancer do not tell me." I advise you to adopt the rule which I follow. I do not want you to lie about it, but never tell a women that she has a cancer if you can get out of it.

This woman came in a very painful state of mind. As a drowning man will grasp a straw, so she was willing to embrace anything that would do her good. She tells me that she has five children and cannot bear to think of leaving them. I said to her, "While I cannot cure you, I may be able to do something which will do you a great deal of good." She jumped at the idea, and I have not disillusionized her. She thinks that I am going to do more than I can do.

When I examined her, I found a great excavation. What I thought of doing was to scrape off the vegetations, and, if I dared, cover the part with nitric acid, but a symptom has appeared which shows that the disease has attacked the bladder, and I can do nothing for her. Three days ago she began to pass blood from the bladder. The urine does not trickle into the vagina, because there is no opening as yet, but the disease has involved the bladder, and in the course of a few days the tissue will break down, and there will be produced a vesico vaginal fistula, through which the urine will trickle into the vagina.

There is still one other thing. That woman has not long to live. Her sufferings will, I think, be excruciating. She ought to have as much opium or morphia as will make her comfortable. Some would object to this, saying that she would get into the opium habit. She will not live long enough to contract the habit. I say let us make the last end of her life as comfortable and peaceful as we can. Give her opium in any form or amount that she chooses to take it, exercising a little restriction in the beginning.—*Med. Journal.*

CASE OF CÆSAREAN SECTION AFTER DEATH OF MOTHER—LIVING CHILD REMOVED.

By J. Mack Hays, M.D., Oxford, N.C.

A short while after 8 o'clock on the evening of the 3rd of October I was hastily summoned to the wife of Mr. C., living seven miles distant. On reaching the house I was informed that the patient was too far gone for me to do her any good. The following history was briefly given me: about four hours previously Mrs. C. was in the yard looking after her domestic affairs and enjoying, apparently, her ordinary good health, when she was suddenly attacked with a violent headache and sent for her husband at the mill, a hundred yards distant. When he reached the house she told him to send at once for the doctor, as she felt very sick and her head hurt her terribly; then, throwing her hand to the back of her head, fell on the bed with the exclamation, "I can't stand it!" She was speechless from that moment, vomited frequently for some little time, several times threw her left hand to her head, and sank rapidly into the condition in which I found her. She was evidently suffering from an extensive cerebral apoplexy, presenting the following symptoms: Complete motor and sensory paralysis of left side of face and right side of body, both pupils widely dilated and totally insensible to a bright light; very slow, stertorous breathing and "drawing in of the paralyzed cheek with inspiration and its puffing out with a sort of explosion in expiration;" pulse rapid and barely perceptible; face pallid. A sharp pinch on the non-paralyzed arm produced no evidence of sensation, nor did the hypodermics of whiskey which I administered as a forlorn hope. The patient was rapidly approaching her end, and was eight and one-half months advanced in pregnancy. I satisfied myself from the husband that the child was probably alive, as he had heard his wife speak of having felt motion the same day. I then laid the case clearly before the husband, telling him that while one life was fast passing away, another was at stake which might be saved even after the mother had breathed her last. He told me to do as I thought best. Accordingly I made the necessary preparations, and, after all evidences of life had disappeared in the mother, and the bystanders sent out of the room, I proceeded without delay with the operation. With one stroke of my scalpel I incised the skin and subcutaneous tissues from the umbilicus nearly to the symphysis pubis; two incisions more, through the linea alba and peritoneum, exposed the uterus to full view; through it I next made an opening as low down as possible and of sufficient size to admit my two fingers, at the same time liberating the liquor amni. Using my fingers as a director I slit up the uterus to the placenta, which I easily detached. The body of the child was now fully exposed, lying in the second cranial position. I lifted it from the uterus, and by exerting some little force to overcome the suction brought to bear upon the head, removed a living male child from its dead mother. The cord was tied and cut as usual. The operation was attended with very slight loss of blood, and that of a dark venous character.

The unusual shape of the child's head, born without any pressure having been made upon it, was quite noticeable.

The child is being fed on fresh cow's milk, diluted and sweetened, and at the present writing (October 15th) stands a fair chance of being raised.

A NEW METHOD OF REDUCING DISLOCATIONS OF THE HIP.

(Dr. J. S. Allen *in the Annals of Surgery.*)

An anæsthetic having been administered to the extent of producing complete muscular relaxation, the surgeon stands over the recumbent patient, flexes the leg upon the thigh, and the thigh to a right angle with the body, brings the patient's foot between his legs so that the dorsum of the foot rests upon the operator's nates, and then the surgeon, passing his right arm beneath the flexed knee, lifts the hips of the patient well from the bed or floor, and holds them thus suspended for a short time; the head of the femur will quickly be drawn back into its socket. The weight of the hips and opposite leg rotates the body outwards, producing just sufficient abduction and extension to draw the head of the femur quietly through the slit in the capular ligament, and direct it into the acetabulum.

The present writer can bear witness to the efficiency of this method, having practised it successfully on the 4th of May, 1885, in a case which had resisted the usual method of reduction,

THE TREATMENT OF ASTHMA.

By Dr. Paul Rodet.

Translated from *L'Abeille Méd.* by F. R. Campbell, M.D.

1. Treatment of the Attack.—The principal indication is to relieve the dyspnœa. For this purpose, the following remedies may be employed, given in the order of their efficiency:

(*a*) *Injections of Morphine.*—These rapidly relieve the attack and produce a quiet sleep, but it is necessary to gradually increase the dose. It should be used with great caution, for fear of inducing morphinism.

(*b*) *Inhalation of Iodide of Ethyl.*—Direct the patient to pour ten or twelve drops on a handkerchief and inhale slowly. This drug rapidly relieves an attack, sometimes instantanously. These inhalations are much to be preferred to those of ether or chloroform, which usually fail.

(*c*) *Ammoniacal Vapor.*—This produces a sedative effect by exciting an excessive secretion in the nose and throat. Many patients are relieved in this way.

It has also been proposed to touch the pharynx with a strong solution of ammonia. A certain amount of inflammation with an abundant secretion is thus produced. This method of treatment sometimes affords excellent results.

(*d*) *The Inhalation of Medicated Fumigations.*—These act upon the bronchial mucous membrane. Nitre papers burned in a saucer near the patient, are much employed. The leaves of acrid narcotic plants, such as stramonium, belladonna, may be smoked in cigarettes alone, or with a small quantity of nitre. Cigarettes made of belladonna leaves, containing arsenic, are also prescribed. These means are beneficial only for a limited time.

2. Treatment of the Disease.—Seek out the causes which produce the attack, with a view to changing the occupation or surroundings of the patient, if necessary. The medical treatment will vary, according to the variety of asthma.

(*a*) *Catarrhal Asthma.*—Avoid cold; treat the laryngitis and bronchitis by ordinary methods, emollient drinks, ipecac and opium, and cutaneous revulsion. If the asthma is not of long standing, Hardy recommends the application, on the chest and arms, of a vesicatory or rubefacient. Tincture of lobelia, thirty to sixty drops a day, is considered an excellent remedy by the Germans.

The waters of Royat or Cauterets and a winter residence in the south, at the seaside, may be tried.

(*b*) *Nervous Asthma.*—Bromide and, above all, iodide of potassium produce excellent effects, although we do not know the rationale of this treatment.

Unroasted coffee, a tablespoonful to be infused in a cup of water over night, and taken at one dose in the morning for several months, may be tried.

Compressed air is an excellent remedy. The same results may sometimes be obtained by playing the cornet or blowing a trumpet, thus producing a distension of the bronchia. Gymnastic exercise of the upper extremities should be ordered for those of sedentary habits. Hydropathic treatment may be employed with patients who do not cough.

(*c*) *Herpetic Asthma.*—That is, cases in which the asthma alternates with attacks of skin disease. Employ the hygienic and therapeutic remedies mentioned above, and, in addition to these, arsenic. Counter-irritants, where the eczema has disappeared. Mont Dore water to be preferred to those of Bourboule, which are better for the scrofulous.—*Buffalo Med. Journal.*

JAUNDICE AND PAIN IN BILIARY COLIC.

Dr. Lawson Tait, in the *Lancet*, discusses the reason why, during the passage of gall-stones, there is frequently no jaundice. In fifteen cases of cholecystotomy he found no history of jaundice, and Dr. Tait has found that the occurrence of jaundice, either in the skin or in the urine, during and after the passage of gall-stones, is of extreme rarity, and not, as has been believed, common. Dr. Tait seeks for an explanation of this fact in the following anatomical conditions of the cystic and common ducts. The common duct is not so long (three inches) as most text-books assert, and is much less rigid and more easily dilatable than the cystic duct, which is larger than most of the text-books describe it, viz., one inch. Hence we can understand how a stone, if not of very great size, will cause intolerable agony while passing through the unyielding cystic duct, and without a trace of jaundice ensuing, the gall-bladder alone being its propellent force; but the moment it enters the common duct the extending impulse will be increased by the influence of the whole excreting force of the liver, so that its passage through the common duct is more rapid. The chief symptom, then, that of pain, is due to the slow passage of the calculus through the unyielding cystic duct, while its rapid passage through the easily distended and much larger common duct gives no time, in the majority of instances, for the production of jaundice, which only takes place after long-continued obstruction of this, the common duct.

LEUCORRHEAL DISCHARGE FROM ROLLER-SKATING.

Dr. Von Klein in the *Boston Medical and Surgical Journal*, writes that he has found in a number of instances leucorrheal discharges produced in young girls by the excessive exercise consequent upon the practice of roller-skating. He adds that he has reason to believe that the practice of roller-skating is injurious to young females by reason of the excessive movements of the lower extremities, and of the pelvic organs, including the walls of the vagina.—From the *Weekly Medical Review.*

SANTONINE IN AMENORRHŒA AND DYSMENORRHŒA.

Dr. J. Cheron in the same journal recommends santonine in certain cases of amenorrhœa and dysmenorrhœa, especially if combined with adynamia, anemia and chlorosis attending the onset of the menses at puberty. Santonine as an anthelmintic acts by causing a lively peristaltic action of the intestines, through which the worms are expelled. The author therefore compares its action to ergot, like which it acts upon the vascular system. It is consequently indicated in certain forms of chronic congestion where the amenorrhœa or dysmenorrhœa is of a passive, adynamic type, where it not only relieves the utero ovarian congestion but also improves the nutrition. For it has been shown that whilst ergot nauseates the stomach, santonine improves the digestion. He prescribes two grams, to be divided into forty pills, of which two are taken before each meal (about one and a half grains at a dose), or it may be given in a mixture of alcohol (to dissolve the santonine) and syrup, each tablespoonful containing 0. 65 grams (one grain). One to two tablespoonfuls before each meal.

BELLADONNA AND IODIDE OF POTASSIUM.

The fact that belladonna produces dryness of the throat, nose and mouth has induced Dr. Aubut to try it rather empirically to combat certain disagreeable effects of iodide of potash, and he has published his results in the *Lyon Medical*. In three cases of naso-pharyngeal intolerance of the iodide a mixture of belladonna with iodide of potassium has given good results. He had also the same success in a young man suffering from acute iodism, in whom he made this symptom disappear by preceding the administration of iodide of potassium by the extract of belladonna. The dose was two pills of five centigrams each of the extract per day, one in the morning and the other at night. In one of the cases he was able to suspend the use of belladonna after some days, continuing the administration of iodide of potassium alone, without producing any intolerance.

VINEGAR IN PUERPERAL HEMORRHAGE.

The editor of the *Revue des Maladies des Femmes* states that it has accidentally been discovered that a large glass of vinegar given as a drink to a woman attacked with puerperal hemorrhage produced immediate contraction of the uterus, and may therefore be employed when ergot is not at hand. Doctor Grigg, acting upon this suggestion, has recommended the use of vinegar to several midwives. He considers it a specific which is of immense value, especially to physicians in country practice.

SOOTHING APPLICATION IN NEURALGIA.

Mayet has presented, before the Société de Thérapeutique, the following formula for a very neat and compact local application for use in neuralgic affections :

Chloral hydrate...	5 parts.
Crystallized menthol.....	5 "
Cacao butter	10 "
Spermaceti	20 "

These constituents are mixed into a paste, which is divided into pieces about two fifths of an inch square, and weighing about thirty grains.

Chloral thus applied in cacao butter has no local irritative effect. The part affected is to be gently rubbed with one of the squares, which is then allowed to melt at the most painful point.—*Journal de Médicine de Paris*.

TRANSMISSION OF PHTHISIS BETWEEN MAN AND WIFE.

Revue de Méd. Prof. Potain presents an array of cases to prove this possibility. In each case the subject of contagion was from a healthy family, doubtful cases being excluded, as also where other causes than contagion might explain the disease. Transmission can take place, without pregnancy or other debilitating cause.

I feel sure that it will soon be the general practice of physicians to warn the husband, for example, to occupy a different apartment from a tubercular wife. When the bacterial craze has subsided we will not be so apt to remember this caution.

DELACOUR'S LIP SALVE.

The following is said to be the formula for Delacour's lip salve, a famous French remedy for chapped and cracked lips, sore nipples, etc. : Powdered nutgalls, pomegranate bark, and sumac, of each, 1 drachm ; myrtle leaves and sulphate of zinc, of each, 30 grains ; wax, spermaceti and oil of sweet almonds, of each, 1 ounce ; virgin's milk (dilute tincture of benzoin), 2 drachms ; balsam of mecca, 12 drops ; unguentum rosarum, 4 ounces ; perfume to suit the taste.—*I bid.*

HÆMORRHOIDS.

Duval gives, in the *Centralblatt fuer die gesammte Therapie*, the following formula for an application to hæmorrhoids :

℞	Unguenti camphorati.....	ʒ 1
	Pulveris gallarium .....grms.	15
	Plumbi acetatis.....	" 15
	Extracti belladonnæ	" 8 ; Mix.

Sig.—Rub on the hæmorrhoids four times a day.

A MIXTURE FOR WHOOPING-COUGH.

A contributor to *Un. Med.* prescribes the following formula :

Tincture of belladonna..... 5 drachms
Tincture of valerian, } each, 75 grains.
Tincture of digitalis, }

For a child two years old, begin with five drops daily ; increase the amount by five drops each day until it reaches thirty drops. The initial dose and the increment are ten and fifteen drops, respectively, for children between two and five years old and for patients who are still older. If the valerian is not well borne, tincture of musk may be used instead. Where nervous and spasmodic symptoms predominate, the author resorts to chloroform, giving to children between two and five years old from six to thirty drops daily, in two ounces of gum julep.

VOMITING OF PREGNANCY.

The latest remedy for the obstinate vomiting of pregnancy is the hydrochlorate of cocaine. Dr. Holtz (*Algem. Med. Wochenschr.*) says that in a case where, everything having failed, he had determined to produce abortion, but at the last moment, thought of cocaine, he gave the patient 10 drops of a 3 per cent. solution, and had the satisfaction of finding the vomiting under control. —*Nat. Druggist.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL, JANUARY, 1886.

THE ORIGIN OF THE EPIDEMIC.

The sub-committee appointed by the Civic Health Board to enquire into the origin of the late small-pox epidemic have submitted their report. This report consists of replies to certain questions put to persons known to have been connected in some way with the outbreak. From them we learn that previous to the beginning of 1885 there had been no small pox in Montreal for several years. and that the disease may be definitely traced from one, and perhaps two sources, and from one patient to another until the sequence of cases becomes lost in the widespread contagion of the early summer.

The lay statements in this connection are fairly unanimous, but it must be a matter of regret to the profession to learn that the stories of the two medical men who ought to know most about the matter—Drs. Hingston and Rodger—differ entirely and radically on important questions of fact. In the absence of evidence it is not our intention to take either one side or the other of this unfortunate controversy.

Dr. Hingston's letter—not embodied in the committee's report—is largely a reply to Dr. Rodger's statements, and we leave it to the professional friends of both these gentlemen to draw their own conclusions from these published letters.—To those who have not had an opportunity of seeing them, and in fairness to Dr. Rodger, it must be plainly statad here that he informed Dr. Hingston of his belief that the case he (Dr. H.) was asked to admit to the hospital was one of variola, that he knew that the patient Longley, a Pullman car conductor on the Grand Trunk Railway, had been exposed to the disease in Chicago ; that he reported the case to the Health Authorities as a case of small-pox ; that the case had been diagnosed independently in the Montreal General Hospital as small-pox, and that it ultimately turned out to be one of small-pox. Notwithstanding this, the impression is abroad that in the first days of Longley's stay in the Hotel Dieu, the medical men in attendance were generally of the opinion that he was the subject of not variola but varicella: We are not in a position to say whether this impression is correctly founded or not, but whatever may have been the understanding, or misunderstanding, as to the conduct of the case, it may, without fear of contradiction, be asserted that there was inexcusable carelessness displayed in the lack of proper isolation of the patient. We understand that students and other physicians were allowed to see Longley, and Dr. Hingston himself says that another man was allowed to remain in the wards because, forsooth ! he wasn't afraid of the disease ! No wonder the disease shortly afterwards breaks out in another ward, a medical student takes it ; friends of patients who visit the Hotel Dieu get it, and soon the whole Hospital becomes infected.

Dr. Hingston emphasizes the fact that he had a care of ventilation in the ward, but the subject

of isolation, in the scientific sense, is entirely ignored. We do not believe that it was carried out. Shortly after this general infection of the Hotel Dieu it was not only considered inexpedient to admit any more patients, but it was also decided to close the institution and to send to their homes those who had previously been under treatment. The result of this determination upon the part of the Hotel Dieu authorities may easily be anticipated; each patient discharged from the Hospital —all impregnated as it was with small-pox contagion—formed a local infecting centre for the propagation of the disease. Had the management of the Hospital put their heads together to determine in what way they could most expeditiously and most thoroughly spread variola throughout this city, they could hardly have hit upon a more effective plan. Instead of vaccinating and quarantining the whole institution they deliberately allowed to go by default the only chance that was left of preventing the further spread of the disease.

It would almost seem as if the enquiry into the origin of the epidemic has served the purpose of averting criticism from the Civic Government. Why was there no permanent small-pox hospital ready for the reception of such patients as Longley and Shattuck? Why was no public vaccination done for a year and a half before the outbreak? Why should there have been any difficulty in getting the Civic Hospital opened?

And the answer to these questions is, that the chief officials of the Sanitary Department were grossly incompetent to deal with the matter of the public health, and because our city council, actuated by petty notions of false economy, refused the necessary funds. Nor, later on, did they grasp the situation, but pallied and procrastinated until the golden opportunity was lost forever.

Montreal has had a bitter experience, and it remains to be seen whether in the future a better record will be shown. Let us hope, with Dr. Hingston, "that it will never again happen in the history of the city that a patient stricken with small-pox will be driven round from pillar to post in the vain search of some place where he can be treated and cared for without endangering the public safety."

BOVINE-VACCINE POINTS.

Messrs. John Wyeth & Brother, of Philadelphia, the well-known pharmacists, have quite recently established a vaccine farm in Chester County, a short distance from that city. The land is undulating, well adapted to grazing, and contains several hundred acres, well watered and wooded. The buildings are all arranged on the latest scientific principles, and the animals and the inoculations have been placed under the immediate charge of Dr. W. L. Zuill, Professor in the Veterinary Department of the University of Pennsylvania. The virus with which the Messrs. Wyeth have started their inoculations was obtained from the Vaccine Bureau, under the auspices of the Belgian Government, in the City of Brussels. The high standing which the firm of John Wyeth & Brother have with the profession in the Dominion of Canada will at once commend to them the vaccine which they produce. The Davis & Lawrence Co. of Montreal are the agents for Canada.

We observe that Dr. Piffard has retired from his editorial connection with the *Journal of Cutaneous and Venereal Diseases*. The Journal will be continued under the sole editorial charge of Dr. P. A. Morrow. We may remind our readers that this is the only publication in the English language devoted to Skin and Venereal Diseases, and during the three years of its existence it has won for itself a high reputation for scientific excellence as well as practical utility. In addition to presenting all that is new and valuable in these special departments, the colored lithographs and wood engravings with which the original articles are illustrated are worth more than the price of subscription.

Judging from the handsome appearance of the January number, which is enriched by an admirable chromo-lithograph and a number of well-executed woodcuts, and the eminently practical character of its contents, this high standard will be maintained in the future.

LACTOPEPTINE.

We have used this article extensively for some years in cases of indigestion, and can recommend it as a very valuable remedy. Being a compound of the five active agents which are contained in the process of digestion, it cannot fail to aid the system in preparing the food for assimilation. It is an invaluable remedy in the summer diarrhœa of

children. In this disease, owing to the great impairment of the vital forces, and feeble powers of the digestive tract, food frequently irritates and increases the difficulty. For such cases we know of no agent in the Materia Medica as reliable as Lactopeptine.

PERSONAL.

Dr. Ebbitts, for nearly a year past one of the Resident Assistant Surgeons at the Montreal General Hospital, has received the appointment of Medical Superintendent of the Winnipeg General Hospital, and left the middle of January to enter upon his duties.

Dr. Peter McLaren (M.D., McGill, 1872) was in Montreal the first week in January. Dr McLaren still is located at Ormstown, P.Q.

Dr. Wells of Quebec has been appointed by the Local Government a member of the Central Board of Health, in the place of Dr. Marsden, deceased.

Dr. J. B. Lawford (M.D., McGill, 1879) passed in November last the final examination for the Fellowship of the Royal College of Surgeons of England.

Dr. Wm. Stephen (M.D., McGill, 1882) has left Montreal to practice in Rosana, Argentine Republic.

Dr. Chandler (M.D., Bishop's, 1880, and Gold Medalist) is a rapidly-rising Ophthalmic Surgeon in Boston, Mass., U. S.

Dr. Heber Bishop (M.D., Bishop's, 1883) is practising in Boston, U. S. His address is Hoffman House.

Dr. Gustin, one of the Resident Assistants at the Montreal General Hospital, has resigned and left for the Western States.

Dr. Robertson and Dr. Corson have been appointed Resident Assistants at the Montreal General Hospital.

REVIEWS.

A Reference Hand-Book of the Medical Science: Being a complete and convenient work of reference for information upon topics belonging to the entire range of scientific and practical medicine, and consisting of a series of concise essays and brief paragraphs arranged in the alphabetical order of the topics of which they treat, prepared by writers who are experts in their respective departments. Illustrated by chromo-lithographs and fine wood engravings. Edited by ALBERT H. BUCK, M.D., New York City. Vol. I. New York: William Wood & Co., 1885.

This is the first volume of a series of eight, which is to comprise the set, and a very large and well-stocked book it is of over eight hundred pages. It is gotten up in the style of an Encyclopedia, and the title-page, which we have given in full, gives a very excellent idea of the character of the work. The undertaking is a gigantic one, and the Editor has a heavy task before him, of which he gives good evidence in the present volume of being well able to deal. We have read carefully a few of the principal articles, and are pleased with the style and the conciseness with which important material facts are given. Some may possibly think that some things might with advantage have been omitted—but, upon the whole, the bulk of the contents are entitled to a place in such a book. The engravings are very fine, the chromo-lithographs (several in number) beautiful, the type clear, the paper and the printing not to be excelled. The fact that several Canadian writers contribute to this, and are to contribute to subsequent volumes, will perhaps give it more than usual interest to the bulk of the profession in the Dominion, while to some the fact that they have nearly all been selected from Montreal will not be a point which will commend it to their favor. Personally, we think the Publishers, have made a mistake in not securing the services of men from various parts of the Dominion. Montreal has medical talent and good writers beyond doubt, but when the writers selected in the United States are from so many varied points, it was a mistake to make one city in Canada the source from which to draw its Canadian material.

A Treatise on Diphtheria Historically and Practically Considered, Including Croup and Tracheotomy. By A. SAUNÉ, Docteur en Medicin Ancien des Hopitaux de Paris, Chevalier de la Légion d'Honneur, etc., etc., translated, annotated and the Surgical Anatomy added, with a full-page colored plate and thirty-six illustrations by Henry Z. Gill, A.M., M.D., LL.D., Professor of Operative and Clinical Surgery in the Medical Department of the University of Worcester, Cleveland, Ohio.

The firm of J. H. Chambers & Co., of St. Louis, Mo., have the above work in press, and will in a few weeks issue it to the profession. We have reason to believe it will be a valuable addition to our literature of these subjects.

THE CANADA MEDICAL RECORD.

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CHRONIC BRIGHT'S DISEASE.

A Clinical Lecture delivered at the Montreal General Hospital, December 8th, 1885.

BY FRANCIS W. CAMPBELL, M.D., L.R.C.P., LOND., Dean of, and Professor of the Theory and Practice of Medicine in Bishop's College Faculty of Medicine.

GENTLEMEN.—The patient now before you is 42 years of age, married, and a father. He is by trade a blacksmith, and has been much exposed to heat and sudden chills. His temperament is decidely strumous, and there are on his legs and arms cicatrices of old ulcers, which I believe were of a strumous character. For the past twenty years he has been a hard drinker, going very often on protracted sprees, though at times he would sober off and not touch liquor for several months. His drink was at first whiskey, but being told that gin was better he took it instead. For the last couple of years he returned to whiskey. His appetite was always bad, but when on sprees would not eat at all, and very little for a considerable time after. About two months ago he noticed that his feet were swollen at night, but that in the morning the swelling was gone. This continued for two or three weeks, when the swelling in the legs increased, and, although lessened by rest in bed, did not disappear in the morning as formerly. Then he noticed that his abdomen was swelling, and that his face on the side on which he slept was swollen when he got out of bed in the morning. About a month ago he came to the Out-door Clinic, and there presented the following condition as taken down by Mr. Punchard, my clinical clerk: Both legs swollen, up to about three inches above the knee; pressure by the finger causes deep pits; abdomen swollen and tense. Tapping the abdomen with the fingers causes a distinct wave to be communicated to the hand placed flatly on opposite side of abdominal parietes. Scrotum swollen to about the size of an ordinary child's head at birth. Penis all but lost in the swelling; face pale, flabby, and swollen, especially so in the loose areolar tissue under each eye; slight headache; exertion causes slight breathlessness; bowels regular but motions are costive; pulse soft and about 70 per minute. Hepatic dullness if anything slightly decreased. Passing about an average amount of urine, which is of a deep amber color. On examination the urine was found of a sp. gr. of 1030, acid in reaction, and to contain about 60 per cent. of albumen. I placed him on a mixture of liquor ammonia acetatis, tincture of the muriate of iron and tincture of digitalis. The first constituent was given in large doses, so as to act freely on the skin. I was rather afraid of this patient continuing as an out-patient, exposing himself, in his visits to the Hospital, to the cold wind of this season of the year, and advised his coming into Hospital. As he declined, however, I gave him directions to clothe his body very warmly when he visited the Hospital and to select mild days for his visits.

Those who saw him down stairs will to-day notice a marked improvement. The swelling in the legs is not half what it was, the swelling on the scrotum is entirely gone, and the puffiness of the face, as well as its pasty charcter, have all but disappeared and, in its place, there is a more healthy hue of the skin. The headache is also better, though

it sometimes bothers him yet. He himself declares that he is very much improved, and remarks that he can now walk fairly rapidly without much breathlessness. I will get him to pass some urine and will test it in your presence. The specimen of urine now before you was just passed by the patient, and its sp. gr. is 1025. Its color is not so deep as the specimen he gave us some weeks ago. I have now boiled the urine, and added two or three drops of nitric acid. As you perceive, the amount of albumen has much diminished, there not being now more than 10 per cent. Altogether the case so far, is a most satisfactory one. I look upon it as a case of chronic Bright's disease. The causes of this disease are :

1. Succeeding acute attack. 2. Constant exposure to cold. Wet and sudden changes of temperature. 3. Abuse of alcohol, especially spirits. 4. Constitutional diathesis : (1, gouty ; 2, syphilitic ; 3. tubercular.) 5. Pregnancy—about 5th to 7th month of utero-gestation. It is met with more in males on account of their exposure.

Symptoms.—Frequent micturition, especially at night, dropsical accumulations, liable to disappear and return, skin deficient in action, dry, rough and harsh, is pale or sallow, shortness of breath. Uneasiness over region of kidney. A headache and dizziness, and serious uremic symptoms may occur at any moment. Derangement of digestion, accompanied with flatulence and constipation, with alternating diarrhœa. There is often gradual loss of sight, and opthalmological examination of eye shows an albuminuric retenitis and hæmorrhage.

In this disease we meet with several varieties of pathological changes in the kidney :

1. LARGE, WHITE, SMOOTH KIDNEY.

This is met with in cases following an acute attack, or it may come on gradually from taking cold. The organs are large and pale with smooth surfaces. In this variety urine generally deficient, pale, turbid, sometimes smoky—sp. gr. either normal or rather high ; contains albumen and various casts, the chief casts being epithelial and granular. Anasarca is a prominent symptom, and effusion into serous cavities. General surface, especially face, is dull, white, puffy, pasty, smooth and glossy.

2. GRANULAR, CONTRACTED OR CIRRHOTIC KIDNEY.

The onset of this form is very chronic and insidious. It is chiefly associated with gout and chronic alcoholism, and in persons well up in years. The kidney is contracted and atrophied, sometimes only weighs an ounce or two ; granulations on the surface. The urine generally abundant, at times very copious, color light, sp. gr. low, amount of albumen slight, sometimes none at all ; casts are few, and are generally what are termed hyaline or waxy and granular. Towards the close the urine is scanty, at times suppressed. Generally dropsy is absent ; if present is slight ; skin is harsh and dry, but not pale, puffy or pasty ; face sometimes pinched. There is also marked debility.

3. FATTY KIDNEY.

The kidney is the seat of fatty infiltration, while fatty changes are at the same time going on in other portions of the body—notably the liver. Under the microscope fatty casts are seen.

4. LARDACEOUS OR ALBUMINOID KIDNEY.

Kidneys generally enlarged, surface smooth, consistence tough and hard. There is evidence of previous deposit of albuminoid material in other organs ; the kidney only as a rule being secondarily affected. At first urine is very copious, pale, no sediment ; low sp. gr., 1005 to 1012. Albumen at first either absent or present in small quantity. Later the albumen becomes abundant and the urine diminishes, and its sp. gr. increases considerably. General dropsy is a prominent symptom. Most cases terminate fatally. Lasts from 6 months to a year and a half ; very often some intercurrent disease cuts them off, such as pneumonia, pericarditis and œdema of the glottis.

Treatment.—The therapeutical indications relate to the dropsy and the prevention of uremia. If dropsy is slight saline cathartics, as sulphate of magnesia or sulphate of soda or citrate of magnesia ; if effusion of fluid is large what are called hydrogogue cathartics are necessary—as elaterium in $\frac{1}{10}$ to $\frac{1}{4}$ of a grain, every hour till it acts. It should then be at once stopped to prevent vomiting. Gamboge or compound jalap powder, either alone or combined with pot. bitart or 5 to 10 gr. of calomel. Diuretics are not very reliable. Of this class, give pot. bitart., in doses not large enough to purge or potas. acet. with the infusion of digitalis. Infusion of Parsley root said to be very good. An infusion of digitalis ℥j in ℥xx of aqua and applied on spongio-pilira over the kidneys is useful. Digitalis leaves in a linseed poultice also over kidneys.

A liniment of digitalis, iodine and squills, rubbed over the loins and legs often increases the urine enormously. It is apt, however, to produce

soreness of skin. Cannot be continued long. Sudorifics are useful. Hot-air bath; introduce hot-air under the bed-clothes, free perspiration, then cover with plenty of clothes. Care must be taken not to produce prostration. Dover's powders, liquor ammonia acetatis, pilocarpine the active principle of jaborandi.

Punctures, in case of excessive distention of skin and genitals, must be superficial, and not draw blood. The quantity of water which can thus be drawn away is surprising. If erysipelas is prevalent do not puncture; the punctures are apt to be attacked with erysipelas. Look out for uremic symptoms, and treat them actively. They are indicated by somnolence, coma and convulsions; use active purgation and hot-air baths, if they come on. Skim milk treatment is good in all forms; best in large white kidney. Hygienic measures, change to a warm climate, and warm woollen clothing. Overtasking of mind or body, exposure to the vicissitudes of the weather, the use of alcoholic liquors, must be interdicted.

WEID OR EPHEMERAL FEVER.

Read before the Medico-Chirurgical Society, Feb. 5, 1884.

By R. A. Kennedy, M.D.

Mr. President and Gentlemen,

In looking over a number of reports of cases of puerperal fever, I found several relating to that condition known as weid, or, as it is sometimes called, ephemeral fever. It has occurred to me to bring this subject before you, as it is not without considerable practical importance from the possibility of mistaking it for that grave obstetrical disease, puerperal fever.

In the different text-books on midwifery but little more than mention is made of the condition vulgarly called weid. Indeed, nearly all these works include it with milk fever, evidently regarding it as an exaggerated state of that disorder. Having, when in charge of the obstetrical department of the Western Hospital met with several severe forms of weid, I have been led to look upon it as something more than an exaggerated milk fever, and something entirely apart from the graver disease, puerperal fever. As a matter of common experience the first flow of milk is in many cases accompanied by some feverish disturbance, and this is usually termed milk fever. The symptoms and sequence of weid are, however, of such a decided character, that the ordinary denomination of milk fever does not appear to me a sufficient definition, but rather indicates a mere passing disturbance. On the other hand, the occurrence of a weid with its pronounced stages is apparently an indication that some specific occurrence has been induced.

Older authorities gave the subject some importance, but modern authors, I think, err in assuming its non-existence, some consigning it to oblivion as a "legend no longer to be believed in." No doubt our improved treatment of lying-in patients, and better knowledge of the physiological requirement of lactation, gives us fewer opportunities to observe such cases, for I am sure the older members will agree with me that it was much more common in the earlier days of their practice than it is now. The term Ephemeral Fever is misleading, unless remembered in this restricted sense, because we find the word used in other than obstetric authors to indicate a frebicula, or slight fever occurring in children and young persons. The word weid is so widely used by experienced women to designate this specific fever that I am surprised not to find any definition of it in Thomas' New Medical Dictionary; and Dunglison defines it only as "Mastitis or inflammation of the breast, or what is vulgarly called a weid."

I would define a weid as a specific ephemeral fever occurring in women of nervous temperament during the earlier periods of lactation, commencing by severe chill, and ending in profuse diaphoresis, such attacks seldom exceeding twenty-four or thirty-six hours.

That character and temperament favor its development is shown by its occurrence chiefly in patients of the nervous class—such patients, when weakened by loss of blood, want of nourishment, or exhausting labors, to which may be added mental depression, being mostly liable to it. And just such cases are met with entering Hospital or amongst the poor. For the same reasons I have met with it most often from the third to the fifth day coincident with the fluxion occurring in the mammary glands, but under other circumstances I have seen it at much later periods, when the functions of the breasts were fully established. An attack is generally attributed to some exciting cause, such as cold, mental emotion, or some derangement of the stomach or bowels, though usually the patient exhibits some inquietude or slight feverishness for a few days previous, yawning, and stretching, with pains in the limbs and soreness of the breasts. The attack commences with a marked chill, beginning in

the back, between the shoulders, and from there rapidly extending over the body, accompanied with great pain in the head and large joints. This cold stage usually lasts from an hour to an hour and a half and is succeeded by a hot, dry fever. The face is flushed, throbbing temples, rapid pulse, and very high temperature; mental confusion also is present and sometimes active delirium. This soon passes into the third stage in which there occurs a most profuse diaphoresis lasting many hours until, finally, the fever and pains are relieved. Throughout, the tongue is more or less coated and constipation exists. The breasts are sore, but not distended, as the milk is generally suppressed. If the lochial discharge is continuing this is lessened in quantity, and there may be some tenderness over the uterus.

The temperature rarely rises above 103° and the pulse above 100, but in severe cases it may exceed these figures. Very few of these cases occur without some other local complication, but as such are not constant they cannot be looked upon as factors in this complaint. Recurrences are apt to take place, and such often assume a resemblance to intermitting fever.

From the severity of the symptoms a case of the kind might be mistaken for puerperal fever until the marked character of its stages, and period of duration had cleared up the diagnosis. A doubt might also arise on the occurrence of the chill, but enquiry as to the part in which this is first felt will soon enable an opinion to be formed. In my experience this chill differs entirely from anything observed in the cases of puerperal fever which I have treated.

The chill invariably commences in the back, between the shoulders—patients will often indicate the exact spot—and from there it rapidly extends over the entire body. In puerperal fever the chills often are insidious in their approach, slower in extension, not violent, and are first noticed in the extremities. I would draw your attention particularly to this difference not only from a diagnostic point of view, but also as a very strong indication of there, being a radical difference in these two conditions.

It is stated to be due to a septicemic absorption from the uterus, having no connection with the breasts, except that of coincidence, and therefore regarded as a mild form of septicemia or puerperal fever. Such is the view of Playfair and others.

The difference in the character of the chill and its occasional occurrence long after a uterine sepsis would be expected, seems to me to disprove this theory, so that I cannot look upon it as a septicemia proper. Leishman, Schroder and other writers agree to its being due solely to over-distension of the breasts. If this is the chief and only offence we would find it an exceedingly common affection in our daily practice, and it would occur more often in Hospital cases, for the majority of such patients never put the child to the breast. Indeed I do not remember to have seen a case other than in nursing women, and in the case to be cited the mother nursed her child up to the time of attack, when it was removed for prudential reasons. Having met with cases at varying periods of lactation, and in some after the functions of the breasts have been well established, the inquiry has naturally suggested itself to me as to the cause of the profound disturbance. I am at a loss for a solution, but have no doubt that it springs from, or is intimately connected with, some abnormal occurrence in the mammary glands. Whether over-distension of the breasts, or, what I have most generally observed, suppression of the secretion of milk develops some change or new product in the fluid, or whether it is due to a reflex action, and therefore, in its nature, a nervous fever only, are matters for discussion. I am inclined to think that both occur, but the latter chiefly. Any exciting cause acting on a patient so predisposed, thereby inducing a sudden disturbance in the activity of glands susceptible of such great sympathetic relations, must affect the whole nervous system very profoundly. The chill seems to point to some such explanation, and is analogous to the rigor occurring after an amputation, or the passage of a catheter, or even urine through the urethra, though here the continuance of the irritation prolongs the chill. The after-stages, especially the profuse diaphoresis, indicate also the deep impression made upon the vaso-motor centres, whilst the shortness in duration of the fever is hardly compatible with septicemia. The following case is condensed from a very full report taken by a student in the Western Hospital:

A. A., æt. 20. S. Admitted Oct. 30th, labor having set in the day previous. On the 31st, at 11 a. m., after a tedious labor, a male child was born. No special difficulties attended her labor. For six weeks before entering hospital she had lived in a cold, damp house and with insufficient food. Prior to this period she had resided in the country, and was always healthy and strong. All through her preg-

nancy she had been particularly well. For the first five days after the child was born no special symptoms occurred beyond a dull pain at the top of the head, with a tendency to restlessness, and the breasts were tender. The child was nursed at the breast up to the time of the attack, when it was removed altogether. Until the attack the temperature had not risen above 100, or the pulse 90.

On Nov. 4th, at 5. a. m., five days after delivery, she was taken with a violent chill. And I now quote the exact words of the report: "This seemed to begin from a spot about as large as a hand, between her shoulders and gradually spread over her body to the extremities. Accompanying the chill a sudden severe pain at the top of the head, just back of the coronal suture, was felt. The headache and chill continued without intermission for the space of about an hour and a half. Warm applications and hot drinks were of no avail against it. About 6.30 the shivering ceased, being immediately followed by a violent fever, great thirst, delirium. Temperature 106; pulse 120, rapid and shallow breathing. Headache still complained of. This state continued for a short time when a profuse perspiration set in, great drops of sweat covering her body; headache and delirium ceased at 9 a. m. She was placed upon tinct aconite. and liq. ammon acet., gradually improving through the day. At two p. m. she felt a slight return of the chill on the right side. Sweating profuse all day, and an uneasy, cold feeling still remaining between the shoulders. At eight p. m. temperature 104; pulse 108. Diet beef tea and broth; the milk was suppressed, breast tender but not distended. Lochia considerably diminished in quantity but not offensive; no marked tenderness of the abdomen.

Nov. 5th (2nd day of fever) 8 a. m., Temperature 103. pulse 100; slept well latter part of night. Says she feels first-rate. Had slight pain on urination, face still flushed, skin hot and moist, no headache or pain elsewhere, great thirst, tongue coated and constipation, respiration slightly hurried and sighing, breast soft and flaccid milk, having been drawn off by breast pump.

No pain in abdomen except on deep pressure, feels soft and involution of uterus progressing normally. Lochia much diminished but not offensive. An enema was given this morning and brought away considerable fecal matters. Treatment continued. To get hot vaginal douches and allowed acidulated drinks. 8 p. m. continues to improve, temperature 101; pulse 90. Five grains of quinine was given as ordered.

November 6, 8 a. m., Slept well all night, mind clear, no pain; temperature 100, pulse 95, and feels well. Skin hot and moist, tongue clearing, thirst not so marked, breast soft, and not painful. No abdominal pain whatever. Lochial discharge increased. 8 p. m. temperature 100; pulse 96.

From this time onward the patient continued to improve; she was placed upon tonics and nourishing diet, the breast gave no further trouble, the usual ward treatment of ung. plumbi, Iod. and pressure being carried out. By the 15th she was allowed up daily, being then convalescent.

Progress of Science.

NOTES ON THE USE OF ANTIMONIALS

(J. B. Nias, M.B., M.R.C.P., in the *London Practitioner.*)

Antimony is not at the present date a favorite drug. I have very rarely seen it used, and perhaps should never have been led to use it myself, if I had not read the "First Principles of Medicine" of the late Dr. A. Billing, a text-book old-fashioned now in its terms, and in its references to physiology, but still a most excellent clinical guide.

Dr. Billing's favorite prescription was a combination of tartar emetic with sulphate of magnesia. It is still official in the St. Bartholomew's Hospital Pharmacopœia under the name of haustus antimoni cum magnesiæ sulphate: little used of late years, it was near to being left out, as I learn from Mr. Jeffs, at the last revision. This was the first preparation that I used. From old out-patient letters I find that the first cases in which I employed it were those of patients suffering from acute pleurisy. There come to St. Bartholomew's, as to all London hospitals, numbers of such from among waterside laborers, stokers at gas works, and others who, in their work, are exposed to vicissitudes of temperature; complaining, as is usual, of cough, more or less fever and pain in the side, the latter being pretty severe, and the chief cause of their seeking relief. These men (they are mostly males) are unwilling to lie up. They are not, as a rule, fit cases for admission as in-patients, and of any remedy that hinders them from work they are singularly impatient. In short, one has to try to cure them while letting them go about their work. Viewed by the light of what is expected in private practice, this may appear futile. If one sets to work rightly, it is not so. At the same time one must be prepared to have failure punished by the presence at the next visit of a pint or more of fluid in the pleural cavity; so that inconsiderate treatment, or, what has happened to me, failure in diagnosis, entails considerable trouble. I quote a case combining both faults:

On September 20 last there came to me, at the Western General Dispensary, W.R., aged 59, a strong, healthy, temperate man, employed at a coal wharf on the Paddington canal, complaining of a slight cough without expectoration, great tenderness over the right mamma, pain on moving the arm and a stitch on drawing a deep breath. He thought that he had strained himself when pushing a barge along the canal with a pole, which rested against his right shoulder. No pleural friction sound was detected, or any morbid sound in the lung. He thought he might have been chilled while sweating, but did not remember anything of the kind. Though there were no marks of injury, I accepted his version, and as he was unwilling to lie up, confined myself to ordering belladonna liniment to the side, and a draught three times a day containing 120 grs. sulphate of magnesia, 50 ms. of liquor morphia acetatis, and one drachm of liquor ammoniæ acetatis—not, perhaps, very erroneous treatment, still, if I had recognized the case as one of pleurisy, I should have prescribed otherwise.

On September 27 I saw him again. He had been at work all week, but the pain had compelled him to knock off on one day. His appetite was bad, otherwise he confessed himself easier. I examined his side, and noted a friction sound in the right axillary line at the fifth intercostal space, nothing more. Puzzled, but persisting in my previous diagnosis, I repeated the liniment, changing the medicine for a draught containing one grain of quinine and three grains of iodide of potassium, three times a day.

When next I saw him he had an effusion into the right pleura up to the level of the nipple. I will not detail the progress of the case, except to say he recovered after three weeks' attendance upon him at his home. This case has been a lesson to me. I hold that if a case of simple pleurisy goes on to effusion under the care of a practitioner, he should blame himself largely, if not entirely, for it. The effusion of serum is the second means whereby Nature keeps the inflamed pleural surfaces at rest, if agglutination by lymph has failed; and any one who considers himself a competent practitioner will hold, I think, that he should not let it fail.

In contrast to this case I quote another in which, in spite of misleading appearances, the malady was recognized, and the treatment, in consequence, directed with success :—

On March 10 last, there came to the assistant physician's department at St. Bartholomew's Hospital, where I was acting at the time, R. C., aged 37, a laborer of intemperate habits, depressed in appearance, and with the general look of a broken constitution. Twelve months before he had been in the hospital with pleurisy accompanied by effusion on the right side. His complaint was of pain in the left side under the edge of the ribs; of cough, shortness of breath, and loss of voice; very bad appetite, retching and vomiting on arising in the morning. Tongue flabby, clean at the edges, furred on the dorsum. Bowels very loose. Urine clear, dark, giving much red coloration with nitric acid. Pulse 120, soft, regular. Temperature normal. On the whole, he presented the picture of alcoholic dyspepsia. Physical examination showed traces of old pleurisy at the base of right lung in impaired percussion note, vocal resonance and thrill. At the base of the left lung I noticed doubtful crepitations and friction sound. This ailment had come on gradually for five days; he could not assign any cause for it. He had continued at work until the day before. Diagnosis was made of diaphragmatic pleurisy. He was ordered a large mustard poultice to the left side, and a draught containing one-eighth of a grain of acetate of morphia one eighth grain of tartar emetic, and sixty grs. sulphate of magnesia three times a day. Three days after he returned much better, the pain, friction sound and crepitus gone, complaining only of a little cough and distaste for food. He was given the haustus cinchonæ acidus, and a morphia linctus and continued to improve rapidly until he ceased attendance.

Inconclusive by themselves, these two cases are selected from a series out of which I have been able to draw some conclusions. Had I to treat these cases over again, I should employ the treatment which I employed with the second, feeling certain that I should have met with equal success.

Of local applications I have come to rely on two only: a mustard plaster not less than four inches square, kept on as long as the patient can bear it, and a mild vesication to the same extent with acetum cantharidis, or linimentum saponis compositum, painted on if necessary more than once. Stronger vesication makes a sore long in healing, and is more than is necessary for the cure.

Before, and for some time after I used tartar emetic, I was in the habit of prescribing the hospital mixtures containing acetate of ammonia with camphor water, sulphate of magnesia or vinegar of squill respectively, adding morphia when required, in a manner which may be condemned as routine, but which is in a large hospital found to be unavoidable. The effect of these I found uncertain, the patients as often returning worse as better. I can hardly convey an idea of the confidence with which I permit myself to treat these cases since my adoption of Dr. Billings's mixture. The quantity of antimony employed should not produce any purgative, emetic, or sudorific effects; if it does it should be diminished, or entirely stopped. Its action is to be appreciated by comparison with the use of other drugs. The alleviation of the pain is not due solely to the morphia, nor to the counter-irritant employed. For it appears in cases where neither has been used; and I myself put it down to a restoration of circulation in the inflamed parts, similar to what I have seen produced in more than one case of erysipelas attendant on varicose veins in the leg, where the same remedy was employed.

Antimony appears to be a tonic to several nerve centres in the medulla (a point to which I shall

again refer), among them to the vaso motor; an action which is reversed by poisonous doses. That it has also a local action on the blood-vessels I think highly probable, but am unable to define in terms of physiology what that action is. My belief in the existence of such a property, however, led me to try the drug in a case of pleurisy with effusion, in the hope of favoring absorption; after the manner in which mercury used to be prescribed. The result was successful: how far it was due to the treatment cannot with certainty be pronounced. :—

H. C., aged fourteen, walked to Mortlake from Paddington to see the Oxford and Cambridge boat-race; and, arrived there, while heated sat down upon the grass. On the way home he felt chilly and giddy and sick; the same evening he had rigors, and a cough appeared. On April 2nd he was brought to me at the Western General Dispensary, and was found to have an effusion in the right pleural cavity to the level of the nipple. His heart was displaced one inch to the left. The temperature was 102°.4. The pulse beat 130 to the minute. I ordered mustard poultices to the right side, and a draught containing 15 ms. of antimonial wine, that is 1-16 gr. of tartar emetic, and 60 grs. of sulphate of magnesia in an ounce of spearmint water three times a day. He was also to take a teaspoonful of the dispensary linctus when the cough was troublesome; to have low diet, and to stay in bed. On April 4th I visited him at his home. I found him much easier, the cough much less, the temperature 101°; the bowels were inclined to be loose. Absence of appetite was the chief thing complained of. This I have noticed in nearly every case in which I have given antimony for a day or so. It is not by the patient's description, nausea, nor the anorexy of fever, but a "feeling of not being ready for the meal when it arrives." Being a spoilt child, he had not allowed his mother to keep on the poultices, and they produced little effect, not reddening the skin. The mixture was continued in half the dose. On the 8th he professed himself quite well. His heart had receded to its normal situation. The area of dulness to percussion had diminished by one inch. Vocal vibration was restored nearly equal to that of the healthy side. Moist râles were heard over base of right lung. He had refused to stay in bed, and had made himself sick on raw apples; the consequent stomach-ache was his sole complaint. I will not detail the subsequent progress of the case; his recovery was complete and rapid. Ten days afterward there remained of the effusion no sign but a flatness of the percussion note, and rhonchi with an occasional friction sound over the affected area. He continued on the same medicine throughout.

Now, though an advocate for the removal by aspiration of the pleural effusions, whenever practicable, I find that it is often not possible to persuade those who are treated at their own homes to submit to the operation: and in such cases any drug which is reputed to promote absorption should receive a trial. The impression left on my mind by this case is that the antimony did act, as mercury is reputed to act, as an absorbent, and at my next opportunity I will repeat the trial.

Whilst following the practice of the Paris hospitals, I several times witnessed good results from a practice of M. Jaccoud's at the Hopital de la Pitié. In cases of serous inflammation complicating rheumatic fever, where he apprehends effusion, he prescribes 30 centigrammes of tartar emetic in 100 grammes of julep, a tablespoonful every hour until the whole has been taken. This produces vomiting and diarrhœa, which cease towards evening. Then the patient receives three grammes (I may misstate the quantity) of extract of cinchona in a cordial. In one case, the subject of a clinical lecture, as a result of this treatment, an effusion had disappeared by the next day. On the day after it reappeared, and the evening temperature rose to 39.4 C. The treatment was repeated with a dose of only 20 centigrammes of tartar emetic, with relief. It was finally necessary in this case to repeat the treatment four successive times, always with a day's interval between each. This is M. Jaccoud's rule: not to trust the benefit obtained on the first day, unless the following morning and evening temperatures be normal. If not, the prescription is repeated on the third day with a diminished dose of tartar emetic; and when the symptoms are subdued, the previous treatment of the joint affection is resumed.

Of thirteen cases of acute rheumatism, complicated with effusions into the cavities of the chest or meninges, and treated with salycilate of soda, in the course of the year 1877, three died. In 1882, of 23 cases similarly complicated, treated, as is above described, he lost one. A decidedly good result. It is generally supposed in England that the treatment of medical cases at least, in France is nihilistic and inefficient; but in dangerous crises it is as energetic or more so than ours, and on the whole justified by the result. I left Paris with more faith in antiphlogistic remedies than I possessed when I went there. It is the general custom in England to leave effusion in the serous cavities, complicating rheumatic fever, alone; some few blisters or abstraction of blood. Aspiration is generally avoided, I believe. Therefore I think this practice of M. Jaccoud should be recorded in the list of remedies.

Though vomiting and purging take the principal part in this treatment, an impression doubtless is also made on the system by the antimony absorbed, by which the course of the disease is permanently modified, a modification which would not be effected by any simply vomito-purgative drug. I cannot render my meaning more plain than by relating the following case:

On February 16th last I was asked by the gentleman who was at that time acting as house surgeon to the Western General Dispensary, to see J.

W., a carman aged 33, an old patient, but who for his present illness had been under treatment four days only, and was progressing badly. Going to the house at once, I found him in bed, propped up with pillows, gasping for breath, his lips swollen and purple, his tongue the same, so large that he could hardly protrude it, and covered with flakes of yellow fur; his face ghastly, dusky and puffy; his eyes glistening and congested. The pulse beat 100 in a minute, large, heaving, regular. The respirations were 40 in the minute. All over the chest were loud, moist rhonchi. The percussion note was good throughout. The pulse of tricuspid regurgitation showed in the jugular veins. I have never, even afterwards, completely satisfied myself as to the lesions in his heart: mitral and tricuspid regurgitation there certainly were; whether there was aortic too I could not decide. All that I made out at the time was that the apex beat was one inch outside the nipple line, and a strong pulsation in the epigastrium. The action of the heart was forcible, tumultuous; both sounds prolonged and indistinct, without diastolic pause. His legs and his hands were œdematous and cold. For some nights he had not slept for fear of suffocation. He complained greatly of wishing to be sick, wanting solid food (which had been forbidden), as it eased the sensations in his stomach and refusing slops. Poultices (which had been ordered) suffocated him, he said; and if the case had not been so serious, it would have been laughable to see, what I once saw on my entrance, the nurse holding a large jacket poultice and his wife a basin of broth, beseeching him to be reasonable and to take what was ordered. That the man was likely to die in a few hours of cardiac dyspnœa, unless promptly relieved, was very plain. He had been taking from the first a mixture containing 5 grains ammonium carbonate, 8 ms. tincture digitalis, sulphuric ether 1½ drachms, infusion of senegas one ounce, every three hours. Sixty grains of compound jalap powder had been ordered on the 12th without producing any effect, also brandy four ounces a day. This stimulating treatment had, apparently, increased the congestion. I thought venesection indicated, but difficulties were in the way. I therefore decided on an emetic, having read of its efficacy in similar cases. From fear of overdoing it, I prescribed what proved barely sufficient. For I ordered antimonial wine ʒss, ipecacuanha wine ʒii, in sufficient water, to be taken at once, and when it should have acted a draught of spirit of ether and aromatic spirit of ammonia, of each ʒss. in water in case he should faint; and, for food, toast, and a brandy-and-egg mixture. And then I took my leave, telling the friends that I had very little hopes of his recovery. Next morning I called, fearing to find him dead. What was my comfort to find him propped up on his pillows, soundly sleeping, sweating copiously, and learned that the emetic had been taken about noon but had not produced vomiting, only two fluid motions. In accordance with my instructions, they had waited for the vomiting before giving him any food or medicine, so that he had been until the evening without taking any. Then he had taken of both and fell asleep, and slept for several hours. I woke him up by listening to his chest. He professed himself much better, the feeling of nausea was gone, and he asked for a chop for dinner. The tongue in particular had shrunk to half the size it was on the previous day. The chest signs were unchanged, and the dropsy not diminished. He was ordered a hot bottle to the feet, the foot of the bed to be raised, to continue the ether draught, and to have the chop for dinner. On the next day but one, the 19th, I found he must needs get up to sit near the open window for fresh air (fortunately the weather was mild and fine), professing himself comfortable. He ultimately recovered, and went back to his work.

Now here was a case in which a very small quantity of tartar emetic, one-eighth of a grain, aided by the equivalent of six grains of ipecacuanha, which may be taken as another eighth of a grain of tartar emetic, sufficed to produce a radical alteration in a malady. The symptoms pointed to his stomach being congested, full of mucus and saliva, and distended with flatus, by which digestion was prevented and respiration was impeded, and the rest of the alimentary canal no doubt was in a similar condition. Partial though the action of the remedy was, it cleared the bowels. No doubt it depleted the blood of a certain quantity of serum, and so prevented further exudation into the bronchi. But it did more: it gave the patient several hours' sleep, and a feeling of comfort and safety which he had not had. This means that his system had not been enabled to accommodate itself to his impaired circulation and hæmatosis until time had been gained to improve them. And the satisfactory conduct of his digestion on the following day shows that the mucous membrane of his alimentary canal had nearly resumed its natural state. Stimulating drugs and a considerable quantity of alcohol and liquids were simply embarrassing this man's malady; and I have no doubt now, looking back at the case, that venesection also would have fulfilled some of the indications of the case; though not, I think, everything that was performed by the tartar emetic practically unaided.

Ipecacuanha resembles antimony in nearly every respect. We are recommended it in preference to the latter, when we require a milder action. This milder action, I believe, is due to a deficiency of emetin in the specimen used, and when the powder is administered in bulk, to the necessity of its extraction by the gastric juice. The experiments of Dr. Duckworth with emetin, related in Vol. V. of the St. Bartholomew Hospital Reports, show that its toxic action is powerful and very similar to that of antimony. As long as the high price of emetin excludes it from general use, it is very desirable that the galenical preparations should be standardised before sale. The use of ipecacuanha in powder as an emetic is wasteful,

and when the stomach is, as in the case of J. W., is not in a condition to secrete, its action is tardy or wanting. From these defects emetic is free, and a judicious alteration in the amounts of the doses prescribed by the Pharmacopœia would reveal merits now denied to it. Its purgative effect is an additional advantage, and one that is often overlooked in its use.

Before passing from tartar emetic I would draw attention to the benefit which medical men may derive from a study of veterinary practice. Veterinary practice is simply a vast field of pathological experiments undertaken by Vivisection Acts, and the use of arsenic as a tonic, familiar to every groom, is worthy our best attention. Its effects, thus used, are exactly those of arsenic as currently related, upon the Styrian arsenic eaters; improvement of the wind, of the circulation, of the functions of the skin, increase in weight, and plumpness of the muscles, the latter being probably the result of diminished tissue change.

Many preparations, all formed by oxidation of the sulphide of antimony, such as the kermes, the glass of antimony, and the golden sulphide have been official, as also various antimoniates and antimonites. All these may be found described in Hooper's Medical Dictionary and similar works. Uncertain by their composition, and by their modes of preparation, they have fallen into disuse. They depend for solution on the acid of the stomach for absorption; whence, as is well-known, violent irritant effects often followed their introduction when accompanied by acid medicines or solid food. The oxide of antimony, which seems to be the active part of all, has superseded them. To this James' powder owes its efficacy, but is reputed, and as far as my experience goes, justly, far superior to the pulvis antimonialis of the Pharmacopœia, which is a simple mixture of the oxide with phosphate of lime. This is, I think, due to the physical condition of the ingredients of the proprietary powder, being more apt to excite the flow of solvent fluid, taken as the powder usually is, on an empty stomach, at bedtime.

For the production of diaphoresis this slow absorption of a considerable quantity of antimony is better than a single minute dose of tartar emetic more quickly absorbed. The same object is attained by administering Dover's powder in a solid form, instead of presenting the active ingredients to the stomach in solution. Trousseau and Pidoux point out that the sedative effects of antimony are greatly aided by low diet, and that with full diet its irritative qualities appear. Depletion aids similarly, so that the most favorable results in sedation are to be observed in those on whom depletion can be most safely practiced, namely, male adults. Trousseau believed strongly in alteration of the constitution of diseases, and I will refer to the article quoted for some interesting notes of the consequent alterations which he found necessary in the prescription of antimonials.

I owe to witnessing the practice of my colleague, Dr. Stocker, at the Western General Dispensary, my first use of the pulvis antimonialis and the James' powder, both of which have been to me the means, alone or combined with other drugs, of conferring many a good night's rest.

Antimony is not an anodyne, and is, therefore, useless against pain. Nor do I anticipate much benefit from it in delirium, from the slightness of its action on the cerebrum; though I am not unmindful of Graves' combination of it with opium for his fever cases. But it possesses a tonic action on the medulla similar to that of zinc, of phosphorus, of atropine, and of picrotoxine; by which it is indicated in cases where wakefulness is due to exhaustion, alone or as an adjunct to alcohol and opium. The sudorific action for which this preparation is noted depends, I think, on the stimulation, mainly of the sweat centres in the medulla, but also, without doubt, of the sweat glands and their distributed nerves. In harmony with this idea is the fact, which I have often noticed, that antimonial powder checks the night sweats of phthisis; which is also a property of Dover's powder and of alcohol. By Dr. Bunton these sweats have been shown to be most probably due to exhaustion of the respiratory centre by coughing, aided by a reduction in the area of functional tissue in the lungs; by which carbonic acid is permitted to accumulate in the blood, and to produce that sweating which is one of its poisonous symptoms. Thus it is that very diverse drugs, all of which possess the power of raising the tone of the nerve centers, may have a common use. I cannot do better than quote an illustrative case:

There came to me at the Western General Dispensary on August 30th last, Eliza H———, unmarried, aged 29, a shirt maker, born in London, All her brothers and sisters died in infancy. She has long been subject to cough, and now complains that it is worse, with much yellow phlegm. She has lost her voice, and has night sweats. Examination showed her chest to be barrel-shaped, with a very limited range of expansion; "breathes with her diaphragm," says my note. The respiratory sounds were very feeble at the apex of the right lung, and the expiratory sound was morbidly prolonged; moist crepitus extended from the apex to the nipple. The heart's action was rapid and feeble. She was ordered a draught containing 1 gr. of sulphate of iron, 10 grs. of sulphate of magnesia, 5 ms. of dilute sulphuric acid, three times a day; at bedtime, a powder of three grains of liquorice with one of pulvis antimonialis. Seen September 6th for me by Dr. Stoker, who noted "much better" and repeated powder mixture. On the 10th I saw her myself, and noted "much better; no night sweats now; very little cough; complains of bad appetite;" that is, the curious absence of the proper sensation at meal time, which I have above noticed. I therefore discontinued the antimonial powder, and repeated the draught with two grains of sulphate of iron, and two grains of sulphate of quinine. She did not come again.

A drug which is a most suitable adjuvant to antimony, where cough is present, is conium. It has been under a cloud since Dr. Harley's examination of its properties, and passes for one of the most inert articles in the Pharmacopœia. Doubtless, its effects are variable, since they are due to a very volatile alkaloid ; this, however, is a reason not for abandoning the use of the drug, but for rendering its composition more uniform. The action of conium on sensation resembles that of curare and of camphor ; it paralyses nerve endings, both motor and sensory. Now it is plain that a drug which heightens the action of the respiratory centre will probably renew the cough, which had exhausted that centre ; to it we may therefore very conveniently add one which will numb to the required degree the nerves that are distributed to the point of irritation. Opium and alcohol both have this anæsthetic property ; atropine and hyoscyamine to a much less extent. All, no doubt, have seen cases of phthisis in which atropia has arrested the sweats, without conferring relief from cough; or has even increased it. I take this to be the physiological explanation of the favorite combination of camphor with hyoscyamus. As a tranquilising remedy in various affections, I have certainly witnessed excellent results from the addition of 4 or 5 grs. of extract of conium to antimonial or James' powder.

In this paper I have not sought to advance new theories so much as to draw attention to the neglect of a remedy which has held a place in therapeutics for a very long time, and which has enjoyed the favor of the greatest physicians. What was santioned by Sydenham, by Huxham, and by Trousseau, must be possessed of qualities which should challenge our attention. Like my knowledge the notes are not exhaustive ; I hope hereafter to extend both.

MODERN METHODS OF TREATMENT OF PULMONARY PHTHISIS.*

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A Clinical Lecture delivered at the Bellevue Hospital Medical College, October 27, 1885.

Gentlemen:—The subject of my lecture before you to-day is to me a most interesting one. It is especially attractive because I believe, by the general adoption among practitioners of the means to be referred to, a positive and great benefit may be afforded to a vast number of individuals who are now sufferers from an otherwise almost hopeless disease. Let me say to you, at the beginning of my remarks, so as to avoid any possible misapprehension, that I am of the opinion at the present time, just as much as ever before, that all the usual means of treatment in pulmonary phthisis which have been proved to be practically useful are none the less advantageous because something newer and further can be added. By all means advise your phthisical patients to observe strictly well-determined hygienic rules—to breathe, habitually if possible, a high, dry, pure, equable atmosphere ; give them cod-liver oil. as much as they can properly digest and assimilate; let all undue mental and physical fatigue be eliminated, if it may be, from their daily existence ; locate them in a large, sunny, well-ventilated apartments ; see to it that their food and drink are nutritious and suitable—in short, do whatever you can to retard the march of disease in the lungs or to promote and obtain absolute cure. Admitted, then, that this plain duty is set before us ; admitted that what our classical text-books teach is sound doctrine, and should be unerringly followed, still, may we not go beyond their teachings and try new methods which reason encourages and clinical observation and experience obviously support?

The answer is evident. The three methods, then to which I call your attention, taken in therankof what I believe to be their relative impor tance are—

1. Increased alimentation.
2. Continuous antiseptic inhalations.
3. Intra-pulmonary injections.

One of the symptoms most to be dreaded in the course of pulmonary phthsis is anorexia. When this condition is insurmountable, the patient's condition is well-nigh hopeless. Food must be taken so as to preserve life. But at times the repugnance to food is so great among phthisical patients that they turn from it in sheer disgust. No matter how temptingly the dish is prepared, there still remains the inability to swallow it. Now, then, how can the appetite be awakened, especially when its complete absence is already feared at an early stage of pulmonary phthisis? Of course, we may, and should, first try the different vegetable bitters combined or not, with an acid or an alkali ; but if these fail—and very often they will, despite our best directed endeavor—what then shall we do?

Under these circumstances, and in view of what my reading and personal experience show me I now recommend *washing out the stomach* by means of a soft-rubber tube connected with a funnel. After a very short period—sometimes within a few days from the time daily washing is begun —the patient will gladly say that his appetite is already much improved. Take another instance —that for example, of a patient whose appetite is not good, it is true, but who, nevertheless, forces himself to eat, and who within a few minutes or hours after food is taken voluntarily, vomits it up. How are such patients to be treated? As I have said in regard to my first exampled —by washing out the stomach daily until stomachal tolerance is, at least, acquired for easily-assimilable food. Further, there is a class of cases in which the anorexia is only moderate and the power of digestion for food not completely lost. Of course, it is an effort to eat, and there is certainly no desire for food. Besides, soon after food is swallowed the

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patient suffers from weight or pain in the stomach, acid eructations or extreme flatulence, which are about equally unpleasant, and render the patient unwilling to eat food unless forced to do so by his own convictions or the urgent appeals of friends. Manifestly, in these instances the patients do not take sufficient food, or do not assimilate it well enough to hold their own, far less to repair the daily damages that are affected by the wasting disease of which they are victims. Here, again, I counsel daily washing of the stomach. In the beginning I do not advise so-called forced feeding by means of the soft rubber tube. I believe it is wiser, in many instances, to wait some days before commencing alimentation in this manner; still, there are exceptions. In certain cases, even after repeated washing of the stomach, the patient will be unable to retain food after swallowing it. He may feel that he needs food, and he may be perfectly willing to take it, and yet every time he attempts to swallow even a few mouthfuls, the food is almost instantly rejected by an effort of retching or vomiting.

Singular to say, the mere act of swallowing appears sometimes to occasion the subsequent feeling of nausea and vomiting. If we introduce food into the stomach with the stomach tube, even in tolerably large quantities, the food is retained, and not only is it retained, but it is digested and assimilated, and the patient soon feels better and stronger. And with the repeated administration of food in this manner the appetite returns by degrees and in a relatively short time, and the stomachal digestion continues daily to improve. After the lapse of several weeks, a month or two, or perhaps longer, daily washings of the stomach are no longer necessary. These may be repeated at longer intervals, finally to be stopped altogether. In regard to the forced feeding, it is somewhat different. The rule is to super-aliment, if possible—to give the patient more than he can possibly crave or desire, to make him digest and assimilate more food than he would be willing to, or, indeed, could swallow. Now, this may be accomplished by pouring into the stomach once, twice or even three times a day milk, milk and eggs, milk, eggs and beef peptonoids, in smaller or larger quantity The main indication is, after all, to *stuff* the patient to his or her utmost capacity, short of causing actual distress or incompetence on the part of the digestive organs. f

It is again, a remarkable fact, that, within an hour or two after the time when a pint or two of milk, two or three eggs, half to an ounce of beef peptonoids have been poured into the stomach of a phthisical patient, he or she will have quite as good appetite as, if not better than, there would have been if no nutriment had been taken. When this forced alimentation, together with the regular daily meals, has been continued for some days, the patient's weight will commence slowly to increase; and, so far as his general condition is concerned, it will be manifestly improved. While this is true—and although flesh and muscular vigor are both obviously on the increase—the intra pulmonary condition will remain absolutely stationary. It may also progress slowly or rapidly. It may, fortunately, become retrogressive and markedly improved. An instance of the former kind was fully reported by me last June, at a meeting of the American Laryngological Association, and I do not wish at the present time to repeat this history. I have not been able to bring before you to-day a case of pulmonary phthisis in which washing the stomach and forced alimentation are being carried out, although I have two such cases (in women) under my care at St. Luke's Hospital.

In place of *cases of phthisis* being thus treated and in order to show you the ease and effectiveness of the plan of *forced alimentation*, allow me to present to you this man. The patient, J. P., is forty years old, single and a cigar maker. He has suffered for a long while from asthma that followed a bronchial attack, which occurred during the war of the Rebellion. He has had dyspepsia during three years, which has frequently been accompanied by vomiting of very offensive liquids. Occasionally he has felt much depressed, and even ill, from the repetition and severity of these paroxysms. All the food he ate lay like a dead weight on his stomach or gave him intense pain. His power of digestion seemed completely gone, and he suffered continued misery unless he recurred almost daily to the use of purgative pills. In this case the stomach-pump was first used on October 22, 1885, and the stomach washed out thoroughly with warm water slightly alkalinized by means of borax. After the first washing, twenty-two ounces of milk were poured into the stomach and easily retained. The operation of washing and feeding with the tube has been repeated twice since, until to-day (October 27th), and to the milk two or three eggs have been added. Already affirms, as you hear, that he has now no pain in his stomach after eating, that food does not lie as a load in his epigastrium, and his appetite has improved. Yesterday he ate and digested some meat without difficulty, which is the first experience of this kind he has had within several months.

Now, then, what this man states I have heard repeatedly before, and had several light cases under my care at different times. For your benefit I will now show you how easily my patient swallows his tube, how easily his stomach is washed out and how acceptable milk received into his stomach through the tube appears to be. A word or two, before I leave this subject, in regard, 1, to the apparatus employed; 2, to the best manner of using it. Simple instruments are often the best, and so it is in this instance. The instrument I show you is, in my opinion, the best one for combined washing and feeding with which I am acquainted. There are several—others invented or modified by different physicians—each one having its special advantage, perhaps, but each somewhat complicated; at all events, none

quite so simple as the one here shown, which, to all intents, is little more than a long rubber flexible tube, with a vulcanite funnel at one end. To be more particular, I would add that the stomach-tube is similar, except for increased calibre and length, to those made by Tiemann or Ford for catheterization of the urethra. This one is twenty-eight inches long and about one-third of an inch in diameter. It is connected at its proximal extremity, by means of two inches of *glass* tubing, with a soft rubber tubing of similar size, five feet in length. This latter piece of tubing is terminated by a funnel.

The stomach-tube may be dipped into warm water before passing it, in order to lubricate its surface or make its passage easier. It is then introduced in the median line beyond the base of the tongue, and the patient is told to swallow. At each repeated effort of deglutition the catheter is pushed further on, until from eighteen to twenty-one inches are introduced. We are then quite sure the tube has penetrated into the stomach beyond the "eyes" by which the food pours into the stomach. So soon as this is accomplished, we raise the funnel to a suitable height—usually the level of the patient's head is sufficient—and pour into it slowly water of about blood-heat, or a little warmer—with the addition of borax. The proportion of the latter may be one drachm to two quarts of water. When we have poured about a pint of fluid into the stomach, or when the patient himself makes *a sign*, or says that his stomach feels distended, we quickly lower the funnel near the floor while *pinching* the soft tube near the funnel with the index-finger and thumb of the right hand, so as to retain fluid in the entire length of the tube. So soon as the funnel is lowered into an empty receiving-vessel, on the ground, pressure on the tube is relaxed, and the water containing the washings from the stomach is siphoned off. After repeated washings, or until the stomach is quite clean and the water comes away clear, we pour in the alimentary substances in the same manner we did the hot water for washing. In withdrawing the stomach-tube we should do it quite rapidly, in order to avoid possible rejection of the food. We should also pinch the tube near its proximal extremity in withdrawing it, so that none of its contents will fall upon the carpet or floor.

Of course it is understood that the daily washing of the stomach should take place in the early morning or at a time when it is comparatively or entirely free from food; otherwise, the tube is liable to be choked up by bits of undigested food. Besides, such pieces may be rejected alongside the tube, and possibly become impacted in the larynx or trachea, causing symptoms of asphyxia. Whenever it is inconvenient to perform the washing at a very early hour in the morning, the patient may be allowed some peptonized milk, and the washing may then be delayed for an hour or two. After a certain number of washings, the patient himself may be able to accomplish this little feat quite as well as the doctor. As regards the mere passage of the tube, he frequently learns how to introduce it with greater ease to himself than the physician can command, and, while introducing the tube is perfectly able to make a passing intelligible remark or two.

We now come to the second part of our lecture, viz., the subject of *Continuous Antiseptic Inhalations*. This, gentlemen, has been a subject which I have studied very attentively during the past two or three years. I have examined many different kinds of oro-nasal inhalers, but I know of none so simple, so cheap and so effective as the one I have in my hand. These inhalers were originally made in London, and sold by Squire. I imported a large number of them for use at the New York Hospital, in the out-patient department, and within a brief period, finding them so useful, I have requested Mr. Ford, of Caswell, Hazard & Co., to manufacture a lot for sale to the public generally. The inhaler itself is nothing but a simple sheet of light zinc perforated with numerous small holes and bent into a somewhat pyramidal shape of suitable size to cover the nose and mouth. The apex of the pyramid—which is the part of the inhaler furthest separated from the mouth and nares—contains a small sponge, held in place by thread upon which the inhalant is poured. The inhaler is held fixed before the nose and mouth by two light elastics, which go around the ears.

I have employed, at different times, a large number of inhaling fluids, and many different combinations. The fluid and combination to which I now give the preference is creasote and alcohol, equal parts, to which I also frequently add a like proportion of spirits of chloroform. This combination is certainly very useful in allaying cough and modifying the quantity and quality of the sputa in pulmonary phthisis. I therefore recommend it very warmly. The alcohol is added to the creasote for the double purpose of diluting it and making it more volatile; the spirits of chloroform are added, in view of the experience of Dr. Cohen, of Philadelphia, to diminish local irritation and excessive cough. The inhaler must not be worn too long at first, nor should too much fluid be poured on the sponge at any single time. In either event, instead of giving relief, disturbance is caused; the throat is rendered more irritable and the patient complains of increased soreness and tightness in the chest. Properly and judiciously employed, the creasote inhalant relieves symptoms notably, and in, the beginning, at least, of pulmonary phthisis is, I believe, a means of decided utility so far as the possible arrest of the disease is concerned. It is important that beech-wood creasote be employed. At first the inhaler should be worn ten to fifteen minutes every two or three hours; afterward, it may be worn half an hour or an hour at a time, or even longer. When the length of time is gradually increased, only positive benefit will result. From ten to twenty

drops of fluid should be added to the sponge at any one time. If more is added, it will cause undue irritation. The fluid should not be poured on the sponge more than two or three times in twenty-four hours. Precisely the way in which creasote is most useful is, perhaps, difficult to state. By its antiseptic action, it is possibly destructive of bacilli; by its local action and general effect, it is certainly of value in combating catarrhal conditions. Where purulent cavities exist, it tends to destroy or neutralize putridity. These are certainly sufficiently good reasons for its use without pursuing the enquiry further. At all events, these inhalations do good. The physician notices it and the patient affirms it. In many instances they allay cough better than any cough mixture, and they are certainly free from great objection of destroying appetite, as opium and morphine so frequently do.

We now come to the third and last topic of to-day's lecture and that is, *The Utility of Intra-pulmonary Injections in Pulmonary Phthisis.* I, for one, gentlemen, believe they do good. I also believe they rarely do any harm. They may occasion localized pleuritis, slight hæmoptisis or cutaneous emphysema—but that is about all. They certainly allay cough, diminish the quantity and change the character of the sputa, and in some remarkable manner, have at times manifest power in lessening the distressing symptom *dyspnœa*. This method of treating lung cavities was first employed in this country by Professor Pepper in 1874; since that time, and except by Dr. Pepper himself, I am not aware that any one but myself has practiced these injections any considerable number of times. I have now made between forty and fifty intra-pulmonary injections, and am disposed to continue them in favorable cases. Of course, it is often a difficult thing to follow up any particular line of treatment in private or hospital practice on account of the prejudices or fears of patients. Thus it is with intra-pulmonary injections and in a similar degree, perhaps, with forced alimentation already fully described. Whenever this little operation can be performed, it is, in reality, a very simple matter.

The point of a fine cannulated needle should be inserted in the first, second or third intercostal spaces, anteriorly, or in the axillary region. While there is no risk in making injections upon or outside of a vertical line passing through the nipple on either side, there is danger in injecting at any measurable distance within this line, for fear lest we penetrate the pericardium or one of the great thoracic vessels. The needle should be inserted from two and a half to three inches. Of course, if considered necessary, the slight pain of the puncture may be annulled by the use of local anæsthesia. I have made use of iodine usually in my injections, and am now employing a solution of the compound tincture, of the strength of one part to four parts of distilled water. From ten to twenty minims may be injected upon each occasion, and the injection may be advantageously repeated in four or five days. Previous to the introduction of the needle of the Pravaz syringe, the patient fully expands the lungs, and retains the air in them during the few moments it takes to make the injection. Slight or moderate cough, some expectoration, streaked or not with blood, may follow the injection, and for a day or two there may be slight localized pain in the region where the injection was made. Further than these symptoms, little or no reaction accompanies or follows the injections. In many cases, as in that of the man whose chest I have just injected for the *third* time within ten days, there is no reaction whatsoever at the time of the injection, inasmuch as he does not even cough. I have told you this patient has a cavity at the right apex.

One of the gentlemen wishes to know how I am assured that the point of my needle has penetrated the cavity. The answer is very simple: By giving a slight movement in different directions to the body of the syringe, we can readily appreciate whether or not the point of the needle encounters any resistance, or is perfectly movable in an empty space, or one only partially filled with semi-fluid material. But, presuming for a moment that I cannot be always confident that I have struck the cavity, does it matter? Practically, and according to me, no. That is to say, if you fear any bad results simply because the injection has been made into solidified tissue about the cavity. Indeed, I am more and more convinced that the best indication for these injections is in cases where the apices are *solidified*, and not *softened*. I am borne out in this belief by my own experience. I have already injected in nearly as many cases of phthisical infiltration at its first stage as at a later period, and I have ordinarily seen apparent benefit result. As to the slight accidents that do occur, they can be easily allayed by an anodyne, external irritation of the chest or rest in bed for a day or two. Of course, when we inject a cavity, we have distinct objects in view, and, if we do not reach the cavity, we fall short of doing what we purposed to do. These objects are, mainly, to disinfect the sputa and to modify the walls of the cavity, so that it will, little by little, tend to close up and cicatrize; and, in producing this result, we shall also expect the amount and character of the secretions from the lung cavity to be sensibly changed for the better. When we inject solidified lung tissue we expect something very different. If there is an underlying inflammatory cause, in very many cases of phthisis—and I still believe there is—we shall modify this inflammatory exudation considerably. We shall, perhaps produce such changes in it as to render it fluid and easier of resorption or expectoration. As to the influence of iodine or other injections on the growth or vitality of bacilli, I have yet no very positive and determined views—any more, indeed, at this moment, than I feel perfectly sure in regard to the real, active rôle of the bacillus itself. Only a few months ago, the chorus

of the supporters of Koch was somewhat after this fashion :

"What is consumption? The bacillus.
What is the bacillus? Consumption.
But what causes consumption? Why, the bacillus.
But what causes the bacillus? Consumption?"

And now I ask, in the words of Professor Loomis, "whether they [these microbes] are the *cause* or the *scavengers* of disease?"

Clinically, of one thing I am quite confident, viz., intra-pulmonary injections of iodine benefit phthisical sufferers. Why not, therefore, give them the opportunity of the treatment, and await patiently the auspicious day when even changing theory may be wholly favorable to their use.

In conclusion, let me urge upon you all to earnestly consider the facts brought to your attention in this lecture. It is a subject pregnant with the most vital interest. Our hospitals and dispensaries show a fearful death-rate from phthisis. Ordinary methods of treatment are confessedly disheartening, by reason of their very slight influence in arresting the march of a dread disease, when, moreover, the odds are, for other and manifest reasons, many against the poor sufferers.

I have studied with you a series of topics which makes me more hopeful of what I may be able to do for the arrest or cure of pulmonary phthisis. In this line of research may all of you find renewed courage and conviction. Perhaps some one among my hearers may yet discover the "arcana" of science in its conflict with this destroyer of our fellows.—*College and Clinical Record.*

ON THE THERAPEUTICS OF NASAL DISEASES.*

By Dr. George Catti,

Assistant at the Vienna Laryngoscopic Clinic.

Within the last few years great progress has been made in the therapeutics of the disease of the nasal cavities, and many morbid conditions of these regions, formerly considered as incurable, can now be treated successfully by proper patience and perseverance. The therapeutic procedures to this end, consist in the thorough cleansing and washing out of the nasal passages by suitable measures, and in the direct application of different medicaments.

As regards the first methods referred to; the snuffing of liquids, the drawing in of fluids through the nose (Siegle, Stork, Wendt), the syringing of the nasal passages (Schrotter), and the various forms of nasal douches (O. Weber, Wendt), have all been recommended as eminent suitable methods of procedure, and their employment has been productive of more or less satisfactory results, so that there is no necessity of entering into their further consideration. Medicinal remedies have been employed in various forms, either after, or without, the previously mentioned measures for cleansing the passages. Remedies can be applied with ease and certainty to the anterior parts of the nasal cavity by means of the camel's-hair paint brush, or also with very excellent results by means of long tampons of charpie, smeared with ointments, or impregnated with suitably medicated liquids, as recommended by Hebra. We also, by the mouth, can treat directly, either with a suitably bent probang, sponge-holder, brush, or portecaustic (Semeleder, Turck, Stork, Schrotter, W. Myer) the diseases of the naso-pharynx, and the various pathological conditions which may occur in the, posterior parts of the septum and turbinated bones.

The middle and upper parts of the nasal passages, however, are very difficult of approach for the purposes of direct and thorough local medication, and when we consider the obstinate character of the diseases affecting these last named regions, and the obstacles to be encountered in their treatment, it is not to be wondered that all therapeutic measures yet proposed have met with but scant success. Any progress in this direction is therefore to be hailed with gratification.

The snuffing of liquids and powders, the insufflation of powdered drugs, and the "douching" of medicated fluids through the nasal passages, are open to these serious objections: *first*, but a small portion of the affected surface can be reached; and, *second*, that the diseased mucous membranes come in contact with the remedies for only a short space of time. Indeed, for excessive hypertrophy of the mucous membranes and for ulcerations, Prof. Schrotter uses the the porte-caustic entirely, with the most satisfactory results. (*See Laryngologische Mittheilunger. Wien*, 1875).

About fifteen years ago Professors Sigmund and Schuh, who were not entirely satisfied with suppositories of cacao-butter, sought for a more satisfactory vehicle. This was found in *gelatin*, and various bougies and suppositories were made with this material, and were found by experiment to keep extremely well. About two years ago, also, Prof. Braun employed gelatin vaginal suppositories, made in the shape of a ball.

Several months ago I had prepared for me some gelatin bougies suitable for introduction in the nose. These nasal bougies were from 8-12 centimetres long (3-4½ inches), 4-6 millimetres in thickness (⅛-¼ inch), conical in shape, and very soft and smooth. When employed, the smaller, pointed end of the bougie is placed in the nose and then rotating, pushed gently backwards until it is completely in the nasal passage.

If the bougie is pushed backwards in a horizontal direction, as it should be, so that it enters the inferior nasal meatus, by examination with the rhinoscope we can see clearly the smaller end of the bougie projecting from between the septum and the middle turbinated bone. The length of the nasal passages varies greatly at different ages and in different individuals, so that when the passage

is short and the bougie pushed in too far, it projects more or less (1-4 centimetres) into the naso-pharynx, and hangs down back of the soft palate. When in this situation, the patient is sensible of a disagreeable tickling in the neighborhood of the soft palate, producing an unpleasant sensation of strangling. Through contraction of the levator and tensor-palati muscles, the bougie will gradually be forced more and more backward, until, finally, it falls into the pharynx or the mouth. This can, however, be entirely avoided, if we previously measure the length of the nasal passage with a sound, and cut off the bougie accordingly.

If the bougie is wrongly placed in the nasal cavity, we will see in the rhinoscopic image its smaller end projecting from between the middle and lower turbinated bones. If it should be pushed in vertically, it can not be seen with the rhinoscope at all, as it will lay more or less curled up, entirely concealed in the anterior nares.

The introduction of a foreign body into the nose almost always causes increased secretion, and from this cause the gelatin becomes liquefied and flows out of the anterior nares. This is to be prevented by tamponing the two apertures with some charpie, so that the melted gelatin is caused to flow out through the posterior nares and into the vault of the pharynx, from whence it is to be removed by coughing or "hawking." In from one-half to two hours the bougie will be entirely dissolved.

The employment of these gelatin bougies for the treatment of diseases of the nasal passages would seem to be extremely rational; *first*, they afford a means by which medicaments can be kept in contact a long time with the diseased mucous membrane; *secondly*, they are easily tolerated by the patients; and, *thirdly*, they produce, even if in only a slight degree, a mechanical pressure upon the nasal mucosa. The introduction of the bougie can be accomplished very quickly and easily, so much so that every patient can learn, without trouble, to apply them. They should be used every day or every other day, in one or both nostrils, as the case may require, or they can be employed in both nasal passages at the same time.

I have now, for a number of months, treated various cases of nasal disease by this method. The most excellent results were obtained in cases of obstructions of the nasal passages following chronic catarrhs.

Patients who for a long time had been treated unsuccessfully according to various other methods, were completely relieved of their troubles by the employment, for comparatively short periods, of the gelatin bougies. The principal remedies employed were copper sulphate, and zinc sulphate, 0.02 grammes (3-10 grain) in each bougie, and other astringents.

This method I believe will also be found to be particularly valuable in the treatment of those obstinate chronic catarrhs which periodically affect many persons in winter. Many of these individuals, such as public singers, actors, teachers, etc., who often find themselves in the unpleasant condition, can be practically relieved of their difficulty in breathing, etc., by the regular employment of these nasal bougies.

In such cases as I had in examining the nasal passages from the front, only an excessive redness of the mucous membrane accompanied by a moderate amount of swelling. The rhinoscopic image shows more or less extensive swelling of the mucous membrane on one or both sides of the septum, accompanied, perhaps, with a moderate amount of swelling of the one or the other turbinated bone. This condition, therefore, does not explain the true cause of the great difficulty in breathing through the nose, which is such a troublesome and annoying accompaniment of these cases. The real seat of the trouble lies in the middle and upper parts of the nasal passages, and consequently in location, where a direct examination can not be made except with a delicate probe: this easily makes a passage for itself between the soft and slippery (*succulenten*) adenoid tissue.

The employment of the medicated gelatin nasal bougies, has furthermore produced moderately good results, in the treatment of chronic catarrhs of the naso-pharynx (post-nasal catarrh) accompanied with hypertrophy of the pharyngeal tonsil. Excessive hypertrophy of this gland, so that it entirely obstructs and overhangs the posterior nares, is seldom seen. In three years' experience amongst the great mass of materials present at the clinic of Prof. Schrotter, I have noticed it but twice. For the most part, the hypertrophied tonsil does not reach over the septum, and overhangs the upper third or at most the upper half of the posterior nares. The deafness and difficulty of breathing through the nose, which accompany these cases, are in consequence of the simultaneous presence of chronic catarrh of the mucous membrane of the eustachian tube, and chronic catarrh of the nasal passages. Through treatment of the last trouble, with the nasal bougies and by painting the pharyngeal tonsil with tincture of iodine, we can often bring about enough of a cure to at least cause a great amelioration in the previous condition of the parts. Cauterization of the gland with the solid stick of nitrate of silver has also been often employed in Schrotter's clinic; less frequently the application of caustic potassa. The employment of the galvano-cautery, and the extirpation of the pharyngeal tonsil (Michel, Schrotter, W. Meyer, Stork) are, besides, methods well known and approved. In many cases, however, owing to the youth or the nervous condition of the patient, their performance is impossible, and resort must be had to the previously described methods of treatment.

The gelatin nasal bougies have been also used in the treatment of scrofulous and syphilitic ozena, a thorough cleansing of the nasal cavities and the removal of the decomposed purulent secretions having preceded their application. Some very

remarkable and satisfactory results were obtained, but as the subject is yet under investigation, its consideration will be deferred until a fuller report can be made.

Finally, this method was employed with the most excellent results in the ozena following ulcerations and necrotic processes in the nasal cavities. Often was it noted that after the removal of some offending sequestrum of bone, the difficulty of cleansing the passages and the acute pain still continued. This was caused by the unhealthy and foul-smelling purulent discharges, which drying very quickly into broad, thick black scabs, could not be removed by the ordinary "douching" process, so that the dressing forceps, or some other forcible means, had to be employed to effect their removal. These scabs obstructed the free flow of the liquids and gave rise to the pain. The regular and continual employment of the gelatin bougies, medicated with carbolic acid or idoform, and the plugging up of both anterior and posterior nares so as to prevent the access of air, so hindered and interfered with the formation of these scabs that a speedy healing of the parts was the result.—*Clinical Notes.*

TREATMENT OF LUPUS.

Dr. Scwimmer reports that after trial of the various methods of treatment for lupus, he has found none which, taken singly, can be pronounced suited to every case. Severe local measures are capable in certain cases of doing more harm than good. Among the most useful means of treatment must be reckoned pyrogallic acid. Applied in the form of a ten or fifteen per cent ointment, three or four times daily, it soon transforms the morbid growth into a pulpy, grayish substance. Although the cicatrix looks clean after this treatment, it almost always contains tubercles, which in many cases renew the disease. To prevent this result he hit upon mercurial plaster, which he employed in conjunction with the former. The pyrogallic acid is seldom able to produce total destruction of lupus tissue alone, and it is well known that the gray plaster has little influence upon the lupoid infiltration by itself; but by using the acid to destroy the lupus tissue, and the plaster afterwards to promote absorption, they act very efficiently. In a series of very malignant cases he pursued the following course with success:

For several days after admission the diseased surfaces were kept completely covered with vaseline smeared on cloths, in order to facilitate the removal of all secondary morbid products, such as scabs, etc. A ten per cent pyrogallic ointment is then applied over the same area, and renewed two or three times in the twenty-four hours. This dressing was employed from four to six days, or, in cases where the cutaneous tissues were insensitive, from six to seven days. On its removal, vaseline was again applied for one day, after which the entire suppurating surface was covered with mercurial plaster. Healing began in from ten days to a fortnight in most localities, but isolated nodes and tubercles could still be detected in the cicatrized integument. Pyrogallic acid should once more be applied for three or four days, causing renewed suppuration of the recently-healed infiltrations, while those more firmly skinned over remained unaffected. When treatment was repeated, so much pain was experienced in many cases on the second day, that mercurial plaster had to be substituted for the ointment; but if this was not the case, the latter was left on for two days longer. The gray plaster was allowed to remain—being changed once daily if the suppuration was trifling, twice or thrice if it was more profuse—until cicatrization was complete, which sometimes required four weeks. If the complaint was peculiarly indolent and obstinate the same process was gone over for the third time, but treatment never extended further than this.

An accurate and unprejudiced comparison of the results obtained in this way, with those following other methods, has proved decidedly favorable to the former. A speedier and much better resolution of the more advanced and wide-spreading growths was found to occur under the combined pyrogallic and mercurial treatment than could have been brought about by the united agencies of scarification and the thermo-cautery.

In conclusion, he states that, "in order to make our estimate more precise, and to obviate any misconception which might cause the means I have recommended to be regarded in the light of a lupus panacea, I present the following summary of the objects which they may be reasonably expected to accomplish:

1. The severest and most extensive forms of lupus—those hitherto most difficult and frequently impossible to manage—may be often sensibly ameliorated by these simple and comparatively painful procedures.

2. The application of mercurial plaster immediately after several days' use of pyrogallic acid, is able to bring about complete absorption of the tubercles and infiltrated cells at some points, while at others it is remarkably effective in arresting the morbid growth, and forming complete and smooth cicatrices, results which are not obtained by the use of either remedy alone. The combined treatment may be employed two or three times in succession without inconvenient consequences.

3. The more circumscribed forms of lupus are less amenable to this method than the diffuse serpiginous, and ulcerated varieties,—perhaps for the reason that in the latter the corium affords a less congenial breeding-place for the morbific cells. Yet sometimes in these same cases, better results are obtained by a previous deep scarification of the affected parts, although scarification alone will prove entirely ineffectual.

4. The duration of treatment is shorter than by other methods, not exceeding three or four months in the worst cases.

5. Relapses are to be looked for here no less than after other processes, but are to be least apprehended when the treatment has been thoroughly carried out—i. e., has terminated in complete and uniform cicatrization.

6. This method is indicated in the most extended form of lupus, whether occurring on the face, the body or the extremities, and is especially suitable in neglected cases which have received little or no previous treatment.

7. The affected surfaces after healing retain their redness for a considerable period. The discoloration gradually fades, however, and its disappearance can sometimes be hastened by using an ointment of bismuth of zinc."—*Glasgow Med. Jour.*

A NEW METHOD FOR APPLYING REMEDIES TO THE EAR.

By C. L. Mitchell, M. D.

Under the title "Ear Cones" the writer desires to call attention to a new series of preparations for the local treatment of diseases of the ear. They are especially fitted for the application of remedies in otitis externa; acute, sub-acute and chronic otitis media purulenta; sub-acute complicated and chronic inflammation of the cavity of the tympanum; and in fact all sub-acute or chronic aural inflammations attended with muco-purulent discharges. also offer a convenient and efficient method for applying different sedative remedies in painful conditions, and for treating the various forms of eczema, pruritus, and other troubles which affect the external auditory canal.

These remedies as their name implies, are in the shape of a truncated cone ¾ inch long, $\frac{5}{16}$ inch in diameter at the larger end, and $\frac{5}{32}$ inch in diameter at the smaller end, which is rounded.

These cones are made of medicated gelatin and when placed in the cavity of the ear, melt slowly and thus bring the medicating ingredient into operation upon the surrounding parts. When used they should be greased or dipped in warm water for a few seconds, and then gently pushed into the ear (the small end first), either by the fingers or with a small pair of forceps.

The idea of these preparations is not original with the writer, for he is familiar with the fact that for a number of years similar preparations have been in use in the Ear Clinic of the Vienna general hospital, by Prof. Joseph Gruber, the distinguished aurist. He believes, however, he is the first one to introduce them to the American medical profession, and considers that the conical shape, as above suggested, will be found to be more convenient and advantageous than that of the balls almonds, as employed by Prof. Gruber.

The Ear Cones should be a very convenient method of treatment for aural troubles, and by the length of time they remain in the auricular cavity should cause a very thorough and prolonged action of the remedy. Drops and solutions exercise but a transient effect, ointments are troublesome to apply, and act slowly, so that there would seem to be ample room in the therapeutics of the ear for a better method of local treatment. With children and nervous patients particularly they should obviate much troublesome manipulation and hence be very gratifying to both patient and doctor.

As regards their actual therapeutic value the writer is not yet able to speak with authority. They have been employed to a limited extent by Prof. Lawrence Turnbull, in the ear clinics of the Jefferson College Hospital, with excellent results, but a more extended and thorough trial is necessary before positive and authoritative statements can be made. Attention is now called to their evident advantage, and the future verdict remains to be pronounced by the members of the medical profession, who will doubtless give them a careful and thorough trial. In conclusion, a short abstract from the pen of Prof. Gruber. (*Wiener Allrgemeine Zeitung*) concerning these gelatin ear preparations, may not be considered out of place:

"I have recently been investigating some new "methods of treating diseases of the ear by means "of medicated gelatin preparations. These were "prepared for the external auditory canal in a "manner similar to the nasal bougies suggested "by Prof. Catti, and which have been spoken of "in the highest terms. According to my instruc- "tions they were made in the shape of little balls, "or of almonds, and contained different quantities "of various remedies, such as sulphate zinc, boric "acid, bichloride mercury, iodoform, etc. In "painful affections, I employed those medicated "with ext. opium aq., or with morphia.

"These preparations can be applied with the "utmost ease. After suitable cleansing or syring- "ing of the auditory canal, they are put in position "by the fingers, or, with the assistance of a small "pair of forceps, and then pushed back into the "auditoroy cavity, if necessary, by a small camel's "hair brush. The external orifice is then to be "plugged up with charpie and the remedy left in "the passage. There it gradually liquifies and "operates gently and for a long time on the "diseased structures.

"As the result of my employment of these pre- "parations, I unhesitatingly say that I consider "them necessary and even indispensable in otolo- "gical practice. In properly selected cases I have "obtained better results by their employment than "by any other method of applying remedies which "I have ever followed. Especially can I re- "commend their use in exudative inflammation "of the middle ear attended with perforation of "the tympanum; in these cases the swollen and "stiffened mucuous membrane of the cavum tym- "pani renders such remedies exceedingly desirable.

"By the gentle and gradual liquefaction of "these remedies they can be allowed to remain in "the passage for a long time without harm to the "patient, and their indicated effect is so aug- "mented by the protracted contact of the gelatin, "that the medicated applications require to be "made with much less frequency.—*Clinical Notes,*

THE TREATMENT OF MEMBRANOUS DYSMENORRHRA.

The treatment of this affection is necessarily both palliative and curative. While the patient is suffering during the expulsion of the membrane, it is very necessary to relieve the pain as far as possible. This, of course, can be most promptly done by the use of opium, which should be avoided, if possible, however, because of its after-effects.

Chloral hydrate answers fairly well in some cases. I am not sure that it has any advantages over chloroform, camphor, and belladonna, or conium and, *Cannabis indica*; in fact, in the majority of cases, one has an opportunity to try several agents, and of course, the patient will decide which gives most relief. Indications for general treatment are to quiet all nervous disturbance and to improve the general nutrition of the mucous membrane. It so happens that when the first part is attended to the latter will follow in due order.

To quiet the nervous irritation and disturbance there is nothing that equals the bromide of sodium. This should be given in twenty or thirty-grain doses, three times a day, for ten days or two weeks before the menstrual period. And, if the pain is not severe enough to require the addition of some of the remedies already named to relieve pain, it may be continued throughout the menstrual period and several days after. From this it would appear that the bromide is to be used continuously; but one or two weeks in each month it can be omitted. When the bromide has been employed for some time, and it seems desirable to give it up, conium may be given in moderate doses combined with camphor, if the patient is weak. If there is any evidence of the rheumatic diathesis, the bromide of lithium should be given. Next to quieting the nervous system, any debility that may exist should be overcome by nerve tonics. Undue nervous excitation so often goes hand in hand with nervous depression that in many cases it is necessary to combine the tonic and sedative treatment.

After subduing all nervous disturbances, I give the patient the iodide of sodium in case she is in fair strength and inclined to flesh. If there is anemia, I prefer the iodide of iron. If these did not accomplish the object, I have employed mercury, giving it in small doses, never continued long enough to produce salivation, carefully watching to avoid this. In cases of anemia where I have feared the debilitating effect of this alterative, I have given the bichloride of mercury with iron. After keeping them upon this treatment until I could see some evidence of its effects, I have then put them upon iodine and arsenic.

In regard to local treatment, I have employed alteratives and sedatives almost exclusively. Of these I have found iodoform most effectual. I have also used iodine and mercury with advantage. In cases where I have found any complications I have carefully attended to them, restoring displacements and correcting flexions, and so on. When the canal of the cervix has been at all constricted I have enlarged it by incision and dilatation.

When the congestion which occurs at the menstrual period does not subside in a few days, I have employed the warm-water douche. After this, I have applied to the cavity of the uterus small bougies of cocoa-butter with as much iodoform as it would take up. Three or four grains of iodoform mixed with vaseline that has been liquefied by heat, and introduced through the pipette, is perhaps the best method of applying it. These have been introduced once a week or once every five days. When there has been much tenderness, and the use of the pencils has caused pain, I formerly used aconite and opium and iodine; this I have introduced into the cavity of the uterus. I am now trying cocaine to subdue the tenderness as a preparatory means to the use of iodoform. But so far this new remedy has not been a perfect success.

In cases where this has failed and the uterus was not especially sensitive to intra-uterine medication, I have instilled into the uterine cavity a few drops of a five-per-cent solution of carbolic acid, making one application a few days after the menstrual flow and not repeating it until the next period. In the interval I have used the iodoform. I have also used the fluid extract of conium and *Hydrastis canadensis;* but this I have found gives more pain than any of the other applications that I have used; and so of late I have used an infusion of the hydrastis alone, which appears to answer as well and gives less pain.

BROMIDE OF ARSENIC IN ACNE.

Dr. Henry G. Piffard, writing in *Journal of Cutaneous and Venereal Diseases*, says:

Conceiving, from purely theoretical considerations, that it might be useful in certain cases, I first tried it in the spring of 1878 in a case of pustular acne vulgaris of moderate severity, and gave it in doses of one milligram (gr. $\frac{1}{65}$) three times a day. Within a week the patient, a young lady, returned, complaining that her face was much worse. On examination, I found on each side of the face a crop of miliary pustules in addition to the acne. The arsenic was discontinued, and a placebo prescribed. This was followed by improvement for a week, when the arsenic was resumed in much smaller doses, and in three or four weeks the case was substantially well. In a second case I had a similar experience, and in a third case I prescribed an alcoholic solution, containing one grain to the ounce, and directed that two drops should be taken night and morning. This patient I did not again see for nearly six months, when she informed me that the medicine had, in a few weeks, accomplished all that she desired. Since then I have used bromide of arsenic with much satisfaction in pustular acne, but have not tried it in other varieties of this affection, nor in other cutaneous diseases.

CONSTIPATION HABIT.

The subject of constipation is so extensive, involving the discussion of so many diseases and remedies, and with its diarrhea of literature covering so much ground, that I forbear, for want of time, if nothing more, from entering into a full consideration of the subject.

That it is often a symptom of disease or a disturbance arising from disease, I need not discuss; but I wish at this time to call brief attention to it as a disease in and of itself, in order to elicit discussion, and thereby enlarge our ideas.

The constipation habit is certainly a perversion of an important function, and is often productive of great harm and suffering. The normal act of defecation, as a rule, occurs regularly once every twenty-four hours, and with a majority in the early part of the day, before or soon after breakfast. In health the call to evacuate the bowels is a peculiar sensation that cannot be understood. If not heeded it may soon cease, and the call not return for an indefinite length of time. Immediately preceding this sensation is the peristaltic contraction of the sigmoid flexure which ejects its contents into the rectum, from which arises the warning and call for voluntary muscular assistance, that is so often unheeded or put off to a more convenient season. But the rectum must be relieved, and if not in the natural way, then anti-peristaltic action takes place, and the load is sent back whence it came, a burden and a log, blunting that delicate sense of the bowels.

Women, I think, neglect the function more than men. This is often from a false sense of modesty, their natural delicacy leading them to endure while away from home, traveling or in society, rather than to withdraw with eyes upon them to a strange shrine devoted to *cloacina*. Even at their own homes, where there is a lacking of modern conveniences, the inclemency of the weather, the exposure to cold, and the foul breath of the vault cause so much dread of the simple act of defecation, as to lead them to procrastinate, to the utter demoralization of the normal defective act. I have no doubt that the trammels of fashionable clothing also interfere to some extent. The considerable straining which is sometimes required to complete the act, may be unattainable from the clothing limiting too much the action of the diaphragm and abdominal muscles.

Sedentary habits which deprive the bowels of the gentle stimulus of exercise is one cause of constipation; and when to the sedentary habits is added position of posture which cramps and crowds the bowels, as is the case with the shoemaker, habitual constipation is almost sure to follow.

The abuse of cathartics is a fruitful cause to induce and confirm this habit. What with the anti-constipation pill, wafers and pellets flooding the land to dredge the *primæ viæ* on the first indication of its filling up, or to be used from the fear that it will fill up, it is a wonder that nature's *cloaca* is maintained at all.

Errors of diet, though not mentioned first, are not least in causing this habit, which is, perhaps, more prevalent in this country than in any other; and some one has said that it is because we eat too little soup. Water as a solvent and a diluent acts in the alimentary canal a very important part, and soup eating should certainly be encouraged in order to counteract the tendency to take our food too solid, and to favor the fecal current.

Whatever line of diet we are in the habit of taking, and the bowels are normal, if we make a sudden or marked change in our diet, it is often attended by bowel disturbances in one way or the other. I have been in a position to observe a great many persons who have made sudden changes, particularly from a mixed, generous diet, to a vegetarian diet, which, from its bulky nature, imposes more work on the bowels than they are used to, often beyond their working capacity, and the result would often be acute constipation. The next step then, was to use the much-abused water enema, which to the overworked bowels, seemed a God-send, but by frequent reputation proved a blight to their work, making them a sluggard in the human economy.

I give one case to illustrate:

Mr. S. had been a vegetarian for five years or more, and had adopted two meals a day. He was in fair general health for one of such habits, but his great difficulty was no natural action of the bowels, which had existed for the last five years. His sole reliance for a movement was the coarse food and water enemata, which he had come to take regularly.

He consulted me, ostensibly for hemorrhoids, which he said the doctor who had treated him told him he had had, and who had expected to operate on him. On making a thorough exploration of the rectum, I was not surprised to find no hemorrhoids, for he gave no symptoms of any. I found, however, a very large, pouch-shaped rectum, with flabby, relaxed and attenuated walls, which I attributed to the protracted use of the water enemata.

I changed his diet, stopped the enemas, gave him three meals a day, had him drink four or five goblets of water per day, and had him inject on retiring one third of a cup of cold water to be retained. Ordered daily massage and kneading of the bowels, with a mild faradisation of the same; also ten drops of fld. ext. cascara sag. four times a day. In four weeks' time he had natural stools, without the use of medicine or treatment of any kind.

A too concentrated diet may cause this habit, but I have observed no danger in this direction. A variable appetite, which makes extremes in quantity and quality of food, is sometimes a cause, but as this would lead us to discussion not intended at the time we desist. I have often observed that a long journey by rail will produce a severe constipation, and have wondered if the constant jarring of the cars have anything to do with it.

The more difficult a disease is to treat successfully the longer the list of remedies employed; that judging from the length of the list in this case, one would be almost discouraged from attempting a cure.

Yet with clear ideas of causes, the indications for treatment are simple, and with the hearty co-operation of the patient the physician may feel quite certain of gaining, sooner or later, the desired result.

The following I give as a general outline of the treatment, which of course must be varied somewhat according to the special indications of each case:

Regulate the diet, having three meals per day of palatable, nutritious food, not too bulky or too concentrated. Have soup at least one meal each day.

On rising, at least an hour before breakfast, drink one or two large goblets of water. If the stomach is weak and inclined to chronic gastritis, I order the water to be drank hot. Twenty or thirty minutes following the water, give the bowels a thorough kneading for ten minutes. Then assume erect position, with arms above the head and left foot on a line with the right and placed in front of it, bend forward until the knuckles of the closed hands touch the floor, then back to the first position, repeating this five or six times; then, reversing the position of the feet, repeat the movements. This is an excellent exercise for the abdominal muscles and an inactive liver.

At night, also, before retiring, drink a goblet of water, and if there are indications of dryness of lower bowels I use an enemata of one-third to one half cup of water, to be retained.

Flushing the sewer may be a good practice with some, making the stomach the flooding tank; but we must use great care not to interfere with digestion.

When it is available, I often order a fifteen minutes' daily application of electricity to the abdomen, using the Faradic current.

If any medicine is demanded, the first on the list is cascara sagrada. I think it is an excellent "peristaltic persuader." It renders in my hands the most efficient service in small and repeated doses.

I impress it upon my patients to make it a daily practice to go stool at a regular hour, to induce if possible, by voluntary muscular effort, a movement, remembering that this measure alone, if persisted in, will oftentimes overcome this deplorable habit. Perhaps the best time of the day for this is soon after breakfast. Patient continuation in this line of treatment will do a great deal to dispel this *bete noir* of medical practice.—*Detroit Lancet.*

A SIMPLE FORM OF NASAL DOUCHE.

Frank Woodbury, M.D. *Medical Times.*

The douche consists of an A shaped elbow of glass tube, to which is attached a short (about three inches) piece of ordinary rubber tubing on one arm, and a long (twenty inches) piece from the other, the latter having a hollow, somewhat conical, glass nozzle, so as to occlude the nostril when pressed into it, and keep in the fluid delivered through a central opening. The short end is also tipped with a glass tube so as to hold it open and prevent collapsing. When not in use the entire apparatus is contained in a small paper box ($2\frac{1}{4} \times 1\frac{1}{4} \times 1$ inch), which may be conveniently carried in the pocket, or may be carried in a valise without breaking. In order to use the douche, a glass tumbler, or any similar receptacle, should have placed in it the required amount of warm water (100° F.), medicated as desired; the douche should be immersed in the fluid, and then the long tube (tightly pinched between the fingers so as to retain its contents) is drawn out of the reservoir until the glass elbow hooks over the edge of the cup, where it is self-retaining; the fluid will flow from the nozzle as long as it is depressed below the level of that in the receiver. The flow can be interrupted by simply dropping the nozzle back into the tumbler. It fulfils perfectly the purposes of a nasal douche, where such an instrument is desired. The douche may also be used for acute affections of the ear (after scarlet fever, etc.), for the eye, and generally for such purposes as an instrument of this size is adapted; among these may be mentioned the administration of milk, broth, etc., to patients unable to sit up, and too weak to drink in the ordinary way.

The advantages of this form of nasal douche are: (1) its simplicity, there being no parts that can rust or get out of order; if any portion is broken it can be replaced at a trifling cost; (2) its convenience, being compact in form, occupying little space, taking but a moment to put into operation; (3) its safety, the stream being delivered without force, simply by gravity, it is almost impossible that the fluid should be forced into the middle ear; and (4) its efficiency being granted, its chief advantage is that it is the most economical douche that is in the market, its cost being insignificant.

In common with every one engaged in general practice, I have found patients for whom a nasal douche might be useful for a short time, but the comparative expensiveness of the Thudichum's douche, and its danger of breakage, have often made me hesitate before ordering it. Any one can make one for himself in a few minutes at a cost of about twenty-five cents. The rubber tubing costs ten cents per foot, and the glass a trifle only. Having given it to Mr. Hayes, of the St. George Pharmacy, with the request that they should be made and sold at this price (twenty-five cents) to patients, he very kindly consented; so that if any one does not wish to take the trouble of making the douche, he can get it by sending this amount to Mr. Hayes, Broad and Walnut streets, Philadelphia.

THE TREATMENT OF TYPHOID FEVER.

Dr. N. S. Davis, in speaking of his treatment of typhoid fever at the Mercy Hospital, Chicago, recognizes fever indications to be fulfilled, or objects to be accomplished.

First, it is desirable to suspend, as far as practicable, the further action upon the patient of all the causes that may have contributed to the development of the disease.

Second, to restore the natural condition of the general properties of the tissues, and thereby retard or arrest those perverted molecular movements which constitute the disturbances of nutrition, secretion, excretion, etc.

Third, to promote the action of certain excretory organs, and thereby deterioration of the blood by the accumulation of the products of tissue-changes or waste matter.

Fourth, to counteract the development of important local diseases, either in the head, chest, or abdomen.

Fifth, to sustain the patient with nourishment suitably adjusted, both in quality and quantity, to the different stages of the disease.

The first indication is fulfilled by proper regulation of the patient's hygienic surroundings, and the exhibition of *potassium chlorate* in dilute acidulated solution. If this indication be fulfilled, and if the patient be supplied with "proper nourishment, in proper quantities," twenty-nine out of every thirty will recover without medication of any kind.

To fulfill the second indication, chief reliance is placed upon the "excitors of vital affinity," oxygen, potassium chlorate, sodium chloride, mercury bichloride, iodine, the mineral acids and cold water.

The third indication is met by nitrous ether, *liquor ammonii acetatis*, and digitalis.

Under the fourth indication, attention must be directed to a number of organs.

1. The impairment of the functions of the brain and important nervous centres, "more especially those centres that govern the action of the vaso-motor, cardiac and respiratory nerves," is best remedied by the selection of those agents which increase the oxygenation and decarbonization of the blood. Strychnine and the mineral acids are the most effective drugs in this connection.

2. Hypostatic congestion of the lungs, muscular weakness of the heart, capillary bronchitis, and broncho-pneumonia are conditions which contraindicate alcohol in any form. Milk, beer, tea, eggs, coffee meet the indication.

3. The changes in the alimentary canal, mesentery, splen and liver demand the most rigid scrutiny.

The pathological changes in the glands of Peyer and Brunner are of greatest importance.

The mineral acids, nitrate of silver, oil of turpentine and strychnine "improve the tonicity of the smaller vessels, lessen passive congestion and exudation, and arrest the tendency to softening and disintegration by increasing the general property of the tissues, called vital affinity, or by increasing the vaso-motor nervous influence, or by both.

The fifth indication is fulfilled by the administration of proper food. Three propositions may govern the practitioner in this matter.

"First, choose such articles for nourishment as, either separately or conjoined, shall contain all the elementary constituents entering into the composition of the blood and organized structures of the human body.

"Second, the article or articles selected should be so prepared that when taken into the stomach they are capable of being taken up and assimilated with but little influence from the gastric and other secretions usually required for the digestion and absorption of ordinary food in health, because these secretions are generally much diminished, especially during the middle and later stages of the disease.

"Third, the quantity given at any one time should be so limited that it will be all absorbed or assimilated before any part of it has time to undergo fermentation or putrefactive changes, by which tympanites and the irritation of the glandular patches in the ileum might be increased, sufficient to afford the patient a fair degree of support."

Meat broths, from either mutton, beef, or chicken, seasoned with salt, milk, buttermilk, milk-whey, tea, coffee and water, correspond to these conditions.—*Ther. Gaz.*

TREATMENT OF CROUP WITH MURIATE OF PILOCARPINE.

Charles Ultes, M.D., Lansing, Mich., communicates the following to the *Therapeutic Gazette*:

I have treated in all five cases of the membranous variety, four cases of mild or night croup, and three cases of diphtheritic croup (laryngeal stenosis), all of which recovered, with the exception of one, the child being attacked the two previous nights, playing during the day. On the morning of the third night I was called and found the child in a condition in which neither tracheotomy nor pilocarpine would be effective; the child died with convulsions two hours after my arrival.

In severe cases it sometimes takes from four to five days until the severe symptoms are passed. The medicine must be used vigorously until relief is obtained.

When the bronchial tubes are filled up, and cyanosis and choking sensations prevail, a dose of syrup or the powder of ipecac should be used to throw off the partially-dissolved membrane and accumulated phlegm. The nausea caused by the ipecac passes off as soon as the vomiting is over, leaving no debility whatever.

It is astonishing what large doses of ipecac may be taken sometimes by children without producing emesis.

The dose of muriate of pilocarpine is from one-fifteenth to one-sixth of a grain, rubbed up in sugar of milk, according to the age and susceptibility, one tenth of a grain being the average. It is probable that the hypodermic method would act quicker and more energetically, but I am well satisfied with the effects obtained when given by the mouth; but I should not hesitate at all to use it hypodermically in desperate cases, mainly with convulsions.

Sweating is not very excessive, even when large doses are administered, and I never saw a case of croup in which the medicine produced any flow of saliva, such as we are accustomed to see in adults. In mild cases, or cases of night croup, mainly in cases of second or third attack, the effect of the pilocarpine (one tenth of a grain) is a sweeping one; a few powders in hourly doses will act like a charm, allaying cough and discomfort, producing rest and sleep.

Diphtheritic croup (laryngeal stenosis) should be treated like any other case of diphtheria, only pilocarpine added to it. In my three cases, to avoid sepsis I used calcium sulphide, one tenth of a grain, every three hours, in conjunction with pilocarpine. But in this variety I think the pilocarpine only acted as an auxiliary, as former cases treated with pilocarpine alone died.

I do not want to be understood that pilocarpine is the only agent in croup to be relied upon; on the contrary, we must treat the symptoms and meet the complications to obtain the best of results.

When the action of the heart becomes weak, as it frequently does, whiskey or brandy are indispensable, either diluted in sweetened water, or in the form of milk-punch, etc. Milk is the main diet in croup, and should be given *ad libitum*.

When the temperature is elevated open the bowels with a few small doses of calomel and prescribe the following:

℞. Acid salicylic ..... ʒ ii;
Sodii bicarbon..... ʒ i;
Glycerinæ,..... ʒ i;
Aquæ, q. s. ad., ... ʒ iv; M.

S. Take one teaspoonful every two or three three hours.

If the urine is high colored and scalding on passing, a little nitrate and chlorate of potassium added will relieve these symptoms promptly.

In some cases I tried the fluid extract of jaborandi, but I never obtained such decisive effects as I did with pilocarpine. I am quite confident that if the muriate of pilocarpine is used in this disease, as stated above, loss of life will be cut down to a minimum.

NOVEL METHOD OF BLEEDING.

Charles Coppinger, F.R.C.S., 114 Upper Merrion st., Dublin. *British Medical Journal*, Sept. 15, 1883.

The patient had been in a state of stupor for twenty-four hours, breathing heavily, but rousing when spoken to, after which she relapsed again. She presented all the symptoms of high arterial tension and an overloaded vascular system; and bleeding seemed clearly indicated. Leeches could not, at once, be obtained, and the lady friends of the patient were horrified at the idea of an operation. Under these circumstances the following plan was adopted, the accomplishment being facilitated by the fact that the patient had been treated, a short time before, for hemicrania, by hypodermic injections of morphia. She was roused up and told that "the needle" was to be inserted into her neck, to which she at once consented. The needle, not of a hypodermic syringe, but of an aspirator, was then introduced into her left jugular vein, which was much distended, and four ounces of blood were withdrawn without difficulty. The result was so satisfactory that, after half an hour, the puncture was repeated, and six ounces drawn off, being the full capacity of the aspirator. The patient recovered, and neither she nor her nervous lady friends in the room had any idea that she had been bled, until the matter was subsequently explained to them.

This method seems one that could be resorted to in many cases, especially where the patient is afraid of an operation, even though slight; and it avoids the display of blood, which is so alarming and distressing to those unaccustomed to the sight.

A NEW METHOD OF TREATING SPRAINS.

Dr. Thomas L. Shearer thus writes in the *Lancet*.

Every one who has had sprains to treat in practice must have been at times annoyed by the slowness of recovery to the injured part. This is not so important in hospital patients, many of whom, enjoying the life, diet, etc., of these institutions, do not object to prelonged treatment; but in the wealthier classes in private practice the surgeon must often hear complaints that the injury is so long in recovery. I have had a considerable number of sprained limbs to treat, and, after employing the usual plans of treatment, was led to adopt a new agent—clay. The clay is simply that used for making bricks, free from gravel, dried, and finely pulverized in a mortar. The powdered clay is mixed with water so as to form a thick and moist consistence. This is spread on muslin to the depth of a quater of an inch, and applied entirely around the part. Over this is placed a rubber roller bandage, just lightly enough to keep the dressing from shifting and to retain the moisture. At the end of twenty-four or thirty-six hours the dressing must be renewed. It may be well to relate a few cases by way of illustration.

Case 1. Mr. T——, aged fifty-eight, was thrown from his carriage, and, in addition to other injuries, received a severe sprain of his ankle, completely incapacitating him from motion of any kind. The part was hard, swollen, intensely painful, and throbbing. The dressing, as above described,

was applied, and in twenty-four hours the pain was almost entirely gone, and the swelling to a great degree had subsided. The dressing was renewed daily, and in eight days the patient was going about attending to his business. The part was free from pain and natural in every respect.

Case 2. Mr. McC——, aged sixty, slipped and sprained his ankle so severely as to confine him to bed. The treatment was the same as that employed in Case 1, and the patient was out and walking in the streets in ten days.

Case 3. Mrs. A——, aged seventy-four, in stepping from her carriage missed her footing, and twisted her left knee violently. In a few hours the part was greatly swollen, hot, throbbing and painful; the least motion of the joint caused excruciating agony. Pressure over the ligament was especially painful. Next day I saw the patient, and applied the clay dressing. The day after the patient was much easier, the swelling rapidly subsiding. The pain was almost *nil*, and movement of the part was not followed by such distress. The lady was walking in her house in ten days after the injury.

Dr. Hewson, of Philadelphia, about ten years ago, introduced earth as a means of treating fibroid tumors of the uterus, and also sprinkled burns with the dry earth, claiming that the tendency to deformity in the latter cases was lessened. However, I am not aware of sprains being previously dressed with clay, and it was thought as well to lay the efficacy of the method before the profession. A number of other cases could be cited, but they would simply be a repetition of those already mentioned. While speaking of clay, it would, perhaps, not be amiss to state that the powdered dried earth sprinkled on the surface of an ulcer, and adhesive straps applied over it, is a capital dressing for cases which are so weak, that even the weakest ointments tend to break down the granulations.

CATHETERS.

A male catheter may be improvised from a piece of wire bent double upon itself, the blunt double end passing readily through the urethral tract to the bladder. The distention of the urethra by the wire will allow the urine to pass.

A female catheter may be made from a short piece of straw, the end being closely wrapped with a piece of thread; or the end of the straw may be dipped into melted sealing-wax. The stem of an ordinary tobacco-pipe is also efficient. Such crude substitutes, if well oiled, are readily introduced. (Levis.)

Catheters may be improvised from hollow flower-stalks and stems, as a dandelion-stem, or from hollow sticks, as elder. Lacking other material, a piece of macaroni may answer for temporary use; but it should not be left long in situ, and must be thoroughly oiled before introduction. A lead-pencil may be soaked in water or steamed, and split at the joint where the two pieces are put together in the process of manufacture, the lead can then be scooped out with a knife, and the two pieces be tied together with fine thread wrapped around them. If the end of this is rounded and the whole well-oiled, a very serviceable catheter may be made. It is not necessary that a catheter should be hollow, for a stick grooved on the outside will answer as well. The grooves may be spiral or longitudinal. A piece of coarse cord, wrapped spirally around a stick or lead-pencil, is a ready means of forming such grooves. A glass tube, the ends of which have been rounded in a flame, will often be available; it is hardly necessary to caution one against the liability of breakage in the urethra. A feather stripped of the feathery portion, and all roughness taken off by singeing, the end being opened and the pith pushed out, will often be available. A rubber tube well oiled, can be used; the sharp corners of the tube may be blunted by holding the tube in a flame for a second or two, or a plug with a shoulder may be fitted to the tube. This hollow plug can be made of lead or wood, and in all cases must be tied into the tube. A rubber catheter of this description, or any catheter for that matter, may often be readily introduced by injecting water through it very gently, so as to open up the canal in advance of the point of the catheter. Even so simple a thing as a paper lamp-lighter may be pressed into the service. This should be made from a strip of stiff writing-paper and tightly rolled spirally. If the strip is covered with paste before rolling, the spiral turns will be tightly held together when the paste is dry. To make sure that the bore is open, the strip may be wound over a string to be withdrawn after winding. If the smaller end of the lighter is dipped into melted sealing-wax, a very fair catheter may be made.

Whatever may be used for a catheter, care should be taken that no portion of it is left in the bladder. Whenever any substance is passed into the urethra for purposes of mechanically relieving existing trouble, the instrument should be freely oiled or greased. Vaseline is the best, if procurable; but, wanting it, lard or oil may be used, or even soap. Oil is injurious to all rubber goods, and will destroy rubber catheters in a short time; but the alternative of using soap as a lubricant is rather harsh on the mucous lining of the urethra. Other things being equal, a given expedient used for a catheter will be more useful the better the lubricant. Even water is better than nothing to facilitate the passage of a catheter.

FOREIGN BODIES IN THE ŒSOPHAGUS.

An ordinary riding-whip, knotted far enough from the end to insure the proper degree of flexibility, may be an efficient expedient in forcing down a body caught in the œsophagus. (Levis.)

A skein of floss silk, or a small skein of worsted doubled, and tied firmly to a string, may be of use in snaring some foreign bodies, and thus extracting them.

THE CANADA MEDICAL RECORD

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MONTREAL FEBRUARY, 1886.

THE SMALL-POX EPIDEMIC.

At last Montreal is free from small-pox, and, so far as this disease is concerned, she has a clean bill of health. This most desirable end has not been accomplished without a vast amount of work, in which several agencies have played an important part. While we have not failed to state our opinion that, in the early part of the epidemic, the Health Department of the city was not equal to the work, we cannot, now that matters are once more bright, but give our praise to the work it did during the terrible month of October, 1885, and since. Alderman Gray, in the direction of his Board of Health, is deserving of the warmest thanks of every citizen of Montreal. It may be true, perhaps, that in the early history of the epidemic, neither he, and for that matter, others, did not at first realize the possibilities of the future; but in this connection it must be remembered that the chairman of the Board of Health, although elected to that position because of his believed aptitude for its duties, is a gentleman engaged in a business which demanded a large share of his attention. While we had a right to anticipate that its functions would be more scientifically looked after than they had been, we had not the right to ask that his own business interests should suffer. Alderman Gray, however, so soon as it became evident that the scourge was taking a firm foothold among us, realized the position, and, throwing aside all his private interests, devoted himself all but wholly and entirely to the work of stamping out the disease. It was he, we believe, that induced the Government to issue its proclamation, establishing the Central Board of Health, and the wisdom of this action no one now doubts. His re-election to the same position this year is an expression of confidence on the part of his confrères in the City Council, and it is endorsed by those of our citizens whose good opinion is worth having.

In the working out of all these multitudinous details which fall to the lot of the Board of Health, especially after the opening of the Mount Royal Hospitals, the able hand of a noble citizen, Mr. Tremble, was constantly seen. This gentleman, without fee or expected reward, was a volunteer of which our citizens may be proud. The members of the Citizens' Committee on the Board of Health were also useful, and did their part in restoring the good name of Montreal. The Citizens' Committee, also, were useful. It had many excellent members, but one or two cranks at times threatened to spoil some of its work. The good sense of the majority, however, kept them to their proper sphere, and the result proved their wisdom. The immense number of vaccinations performed by their Vaccination Committee was an important factor in arresting its spread. The money they spent was well placed. In hospital work at the Mount Royal Hospitals the noble self-denying labor of both the Roman Catholic and Protestant nurses should never be forgotten. It is beyond all praise. Dr. De Bonald and Dr. Gardner did their duty conscientiously and well—we need not say more concerning them. In the Justices of the Health Court, Montreal was fortunate in having two such fearless and upright men. Their judgments were above suspicion, and exercised an influence which extended far beyond the City of Montreal. The Central Board of Health, brought into existence on the 4th of September, 1885, by Proclamation of the Lieut-Governor, was the focus from which all power emanated. Their rules and regulations —which had and still have the force of law—are perhaps the most comprehensive and severe that have ever been created to stamp out a small-pox epidemic. Their power was well illustrated when, under one of its rules, St. Cunegonde was brought to terms by the erection of barricades at all the streets entering into Montreal. It has still a heavy work on its hand, for small-pox is still epidemic in many parts of the Province. And, lastly, Montreal was more than fortunate in having as its mayor Mr. H. Beaugrand—a man of rare energy and decision of character. His action was ever most opportune, and throughout the whole epidemic he was never once found wanting. The gratitude of every sensible man in the city is his, and as his return for a second period by a large majority, is well assured, we trust a more tranquil and peaceful time is in store for him.

THE CANADA MEDICAL RECORD.

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CLINICAL LECTURE.

Delivered at the Montreal General Hospital, December 15th, 1885.

BY FRANCIS W. CAMPBELL, M.D., L.R.C.P. LOND, Dean and Professor of the Theory and Practice of Medicine in Bishop's College Faculty of Medicine.

HYSTERIA.

The patient who presented herself last Thursday the 7th of December, in the out-door room, and who is before us to-day, is suffering from hysteria. This is a purely functional trouble of the nervous system, *i. e.*, she has not any organic disease which, is the cause of her present condition. She is a servant, has been much confined to the house, and her general condition has for some time been getting below par. Her appetite is poor, at least is not what it ought to be, and her temperament is highly nervous; she had a choking sensation, caused by the feeling as if a ball was in her throat. She is very emotional, and the class will remember that when we first saw her it was a matter of some difficulty for her to restrain her tears. I placed her on the following prescription:

℞ Potas. Bromid., ʒ iii.
Tinct. Valerian Amon., ♏ iss.
Liquor Strychnia, ʒ ii.
Aquæ ad. ℥ vi.
A dessert-spoonful three or four times a day.

And the result has been, she informs me, very satisfactory. There has been a decided improvement. The choking sensation has all but disappeared, and she is able to attend better to her work.

Hysteria is characterized by various motor, sensory and intellectual disturbance. It is a disease which is met with in women, in fact may be called a disease of females, although in my practice I have met with several well-marked cases in male adults. It is often met with just at that period of life when the sexual functions are developing, and may continue for a number of years, manifesting itself under the most trivial exciting cause. The hysterical type is said to be inherited. It frequently develops its manifestations in females, at or just previous to the catamenia, when an examination of the ovaries will generally show that they are in a state of congestion, being swollen, hard and tender. At one period *all* hysterical phenomena were attributed to ovarian or uterine irritation, but it is now known that many cases have not this origin. Violent hysterical paroxysms have been known to take place in women where both ovaries and uterus were congenitally absent. The blood of hysterical patients is generally deficient in red corpuscles; a condition of anemia is present, and when this is the case the nervous tissue is very irritable. The symptoms are numerous and varied, the following are among the chief: The patient experiences rapid change of feeling, without any apparent cause; at one moment she is sad and desponding, the next bright and joyous; one minute in tears, the next bursting into fits of uncontrollable laughter; the hands and feet are hot and cold in turn. The patient fears Paralysis, on account of a numbness and tingling felt, generally in the hands and fingers. These generally disappear or are forgotten when the attention is fully occupied. Pain at the heart, palpitation, rapid breathing, a sensation of fulness in the stomach and bowels,

often causing the patient to loosen her corsets. The rising and falling of a ball in the larynx ;this is called the "globus hystericus" or "hysterical ball." It produces a sense of suffocation, and is so real that the patient often places the fingers in the back of the throat in the hope of removing the "ball"; the face gets pale and red by turns. Some cases do not advance beyond this, but others go a step further, when paroxysms of a spasmodic character, both clonic and tonic occur. When a severe attack is about to take place, while many of the symptoms I have given are present, in addition, the jaws are fixed, the face retracted, the teeth grinding, the hands clenched, the limbs drawn up and rigid. Such is a tonic convulsion. The attack may only last a few minutes—it may continue an hour or two. A flood of tears is the first symptoms of subsidence, a large quantity of pale limpid urine is passed, and the patient falls asleep exhausted. Other cases have irregular clonic convulsions, the patient screams, throws her limbs about, or throws herself on the floor, tears at her hair and throat, the abdomen is full of gas and gives out a loud rumbling sound, like distant thunder. This is called Borborygmi. Consciousness is not lost, the eyelids, though closed, are in a constant state of trembling, and no matter how wildly the patient tosses about, they very seldom ever injure themselves. The attack passes off as do the others by subsidence of the paroxysms, the passing of a very large amount of pale urine, followed by deep sleep. The duration of the attack may be a few hours, or only a few minutes. Hysterical patients are very sensitive of sound and of odors; the appetite is perverted, and they have a strong predilection for chalk, slate pencils, sealing-wax; others again for vinegar and pickles. They also suffer from headache, and hyperæsthesia of the scalp. This latter is sometimes so great as to render combing of the hair impossible. Neuralgic pains in the mammæ are common, and they are tender to the touch. Abdominal tenderness is often complained of. The slightest touch is painful to the patient, but if attention be diverted, deep pressure is painless. There is tenderness over the spinous process of a few vertebræ, and pain in the knee is often complained of. A common symptom is paralysis of the bladder, from over-distension, requiring the use of the catheter. Temporary paralysis of muscular groups occur, lasting variable periods, spasmodic flexion of the fingers, hand or fore-arm may occur, so, also, may spasmodic extension of hip, knee and ankle joint. The heart is often weak,there is at times epistaxis, hæmoptysis and hæmatemesis. Amenorrhœa and dysmennorrhœa are common. Great care must be taken not to sympathise with your patient—nothing is more injurious than to do so. It is extraordinary with what ingenuity and perseverance an hysterical patient will attempt deception of her friends and medical attendant. A little care and thought will prevent any error in diagnosis.

Treatment. When the case is well developed, moral and hygienic means are the most useful, change of scene and travel, with a view of constant mental occupation is very beneficial. Early hours and plain food must be insisted on. Exciting novels, must not be read, especially such as appeal to the sexual passions. This is preliminary treatment, when an inherited influence exists. If, in spite of this, the hysterical condition develops, medicines are necessary. Iron must be given, if there is anemia, and the best iron preparations are those which are most readily assimilated, such as the dialysed iron of Wyeth & Son of Philadelphia, the sulphate of iron, reduced iron, or ferri redactum, the carbonate of iron, the ammon. citrate of iron and arseniate of iron. When possible, it is well to give iron in pill form, so as to prevent its acting on the teeth. If it has to be given liquid it should be taken through a quill. Strychnia and phosphorus are useful, they help to build up the tone of the nervous system. If the patient is plethoric a few leeches over the ovaries will be useful, while internally give the bromides, gelsemium and cimicifuga. For the hysterical feeling without convulsions, the ammoniated tincture of Valerian, in 3ss to 3i doses every 4 hours, or the same quantity of Hoffman's anodyne, *i.e.,* Spt. Ether Sulph. Co. In the convulsive form, inhalation of nitrite of amyl or chloroform, dashing cold water over the face, rectal injections of turpentine or tincture of assœfatida, this latter may be given internally or in the form of pill. In very bad cases morphia in ¼ gr. dose may be hypodermically injected. The paralysis should be treated by faradic electricity. Sometimes hysterical subjects are so bad that they become bedridden, *i.e.,* they cannot be induced to leave their bed. I knew a lady who was for years bedridden, from what she termed spinal disease. It was pure hysteria. The house took fire, when she rapidly left her bed, and never returned to it unless for her night's rest. She transmitted the same nervousness to her daughter

who, in a modified degree, followed in her mother's footsteps. It was only by strong moral influence, that she was saved from the development of it to its full extent. For such subjects Dr. Weir Mitchell, of Philadelphia, has devised a plan of treatment. It consists in the combined use of massage, faradizations and forced feeding. Massage consists in friction kneading and tapping of all the muscles, except those of the face in passive motions of all the joints, and in muscular motions produced by faradic applications. The frictions are made with either lard or cocoa butter. The diet at first consists of milk only, but additions are constantly made to it till a liberal allowance is given. No exercise is allowed, all movements are made for the patient, in other words, the patient has exercise without voluntary effort. Increase in weight soon takes place, and when the improvement has been decided, voluntary exercise is permitted. The patient must be separated from all her former associates and the sympathetic surroundings of home. The prescribed milk diet begets hunger, which soon takes the place of indifference. Her forced rest in bed induces a desire for movement; this is the result of the monotonous idleness. The moral force of her new surroundings reacts upon her, and before long she is able to step out once more into the world a new woman.

Worms.

The Outdoor Department, so far as my experience goes, has not lately furnished many cases of worms for our consideration. Yet, worms are very common in children. The little fellow before you came to us about two weeks ago, complaining of loss of appetite and symptoms of nervous disturbance. He presented a pale appearance, nose somewhat sharp and pinched, eyes heavy, pupils considerably dilated, and the breath was somewhat heavy. Generally his appearance was what I then called "wormy"—an appearance somewhat difficult to describe, but which I still think is well seen in this young boy, and to which I particularly draw your attention. Carefully impress his features on your memory, and it may prove useful to you at some other time. Believing, then, that he suffered from worms, I ordered him 3 powders of santonine of 3 grs. each, which were given, as I usually direct it to be given, *i.e.*, one night, morning and night, to be followed next morning by either castor oil or senna tea. I generally prefer the latter, because it is administered with greater ease. Do not say anything about giving the child medicine, but place before it at its breakfast a cup of senna tea, colored with milk and well sweetened. Most children are fond of tea, and they will readily drink some of it before recognizing that there is something wrong. Enquire what is the matter with the tea, suggest that it is too strong, and add more milk and sugar. The child will take another drink, but soon recognizing that the improvement supposed to follow the additional milk and sugar has not come up to its expectation will refuse to take more. Acquiesce in the child's decision, for there is every probability that enough has been taken to act well on the bowels. The result in the case before us was the passage of two worms, belonging to the class of the Nemotoda, or round worms, a specimen I should judge from the description the mother gives, of the Ascari Lumbricoides, the most common worm which infects the intestinal canal of the human subject. Although only two have been got away I am satisfied there are more behind, and after a brief rest we will again endeavor to get rid of them. The riddance of those two worms has been beneficial to the patient, who is slowly improving. A week ago I placed him on the syr. ferri. iodidi, with a view of improving the condition of his blood. I have not the time to enter even briefly into the subject of the various worms we as physicians will be called upon to treat. But a word or two regarding the most common—the Ascari Lumbricoides.

The ova of the worm is believed to enter the body through drinking water. There may be only one or two, as in this case, or they may reach thousands. When very numerous, they are grouped in bundles and at times occlude the bowel. Their habitat is the small intestine, and they are met with mostly in the autumn. The worm is cylindrical in shape, reddish-brown or brownish-yellow in color, tapers at both ends. Females when passed are often found to be loaded with young. When they are numerous the following symptoms may be present, in whole or in part: Colicky pains about umbilicus, tumefaction of the abdomen, capricious appetite, nausea, at times vomiting, diarrhœa, whey like urine, itching of the nose and anus, blue mark under the eye, dilated and at times unequal pupils, irregularity of pulse, attacks of a choreic and hysterical character, night turns, restless sleeping, constantly tossing about, grinding of the teeth. These worms sometimes crawl up into the pharynx and producing a feeling of tickling,

at times of nausea, the fingers are passed backward, the worm seized and withdrawn. They also find their way into the Eustachian tube, the nose and the larnyx, in the latter case death ensues rapidly from suffocation.

Santonine is the common remedy ; calomel has vermifuge properties even alone, but it is a good addition to santonine. Chenopodium or worm seed is good. It is usually given in the form of oil. It is seldom however used on account of its disagreeable odor and taste. The fluid ext. of spigelia, better known as pink root, is a very excellent vermifuge. It should be given in dose of one to four drachms.

AMPUTATION OF THE TONGUE.

BY THE INTRA BUCCAL METHOD BY MEANS OF THE GALVANIC CAUTERY.

By Dr. L. Girerd.

Surgeon to the Interoceanic Canal Company at Panama S. A. (Translated for The Record by Dr. Wolfred Nelson, late of Panama.)

Patient, a middle-aged man, well-nourished.

Case.—On the edge of the tongue, near its root, on the right side, on a level with the last molar, is a fungoid ulcer, which rests on a hard and tumified base. It is surrounded by a number of granulations. Fortunately, the glands in the vicinity are not involved.

Some ten months ago the patient experienced a burning sensation on that part of the tongue while smoking, a small pimple followed, accompanied with occasional lancinating pains.

Preliminary tracheotomy was performed seventeen days before operation. He took cold and some tracheo-bronchitis followed, from which the patient had not entirely recovered at the time of the operation. The operation took place on the 9th of April, the galvanic cautery being used. The patient came under the chloroform readily, then suddenly stopped breathing, instantly. I sprang on the operating table, seized my patient firmly by the legs, and hung him head downwards, whilst Dr. Vernial practised artificial respiration. (I was assisted by Drs. Vernial, Meurisse and Nelson.) The syncope yielded readily to the above treatment, when I proceeded with the operation. Bunsen's modified cells were used, twenty small elements were brought together in series of four, the five series being connected. The patient's mouth was kept open by Charriere's *ouvre bouche.* The lips and gums were protected by pledgets of wet cloth secured by elevators. When all was ready a platinum wire, with a diameter of seven-tenths of a millimetre, was passed through the tongue by means of Reverdin's half-curved needle, passing it obliquely before and behind the sore, from right to left, then from below upward ; thus the needle entered on a level with the root of the tongue near the floor of the mouth, in the posterior third of the right side of the organ. The ends of the platinum wires were connected with the resphones. The wire played on the middle part of the dorsal surface of the organ. The current was turned on ; the loop, under delicate traction, cut its way out. The section was made slowly, and at times when the current was too intense, as shown by a greater incandescence, it was modified. A second wire was passed horizontally towards the base of the organ, using the same needle, commencing at the level of the first incision, and coming out behind the hardened growth. Under gentle traction, the second section was completed. The third and last section was destined to sever the growth from the base of the tongue on the floor, in its mouth being its only remaining attachment. This section was a transverse one and completed the removal of the diseased parts.

The sections were as clean cut as if done by a bistoury. There was no hæmorrhage. The eschar was slight and almost imperceptible.

Following the operation a careful examination of the tongue was made, to make certain that the whole zone of disease had been removed. After treatment : ice in the mouth and borax lotion.

Remarks.—If we wish to avoid primary and secondary hæmorrhages while making the regular sections, it is necessary to proceed slowly and with the greatest caution.

The patient's temperature on the evening of the operation was 37°4. C. He was feeling very well. He was discharged from the Canal Hospital on the tenth day. Following the operation there was some difficulty in articulating, later the man spoke fairly well. The section removed was somewhat riangular in shape and made a large hole in the ttongue.

(*Translator's Note.*) I saw the man some months after the operation, when he was in excellent health. He was delighted with the results, and loud in his praises of Dr. Girerd's skill. The impediment to speech was very slight.

W. N.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, Dec. 18, 1885.

T. G. RODDICK, M. D., PRESIDENT, IN THE CHAIR.

Unusually good convalescence after Ovariotomy.—Dr. TRENHOLME related the history of the last two cases operated upon for ovarian dropsy. In one case the temperature reached $101\frac{3}{5}$° ten hours after the operation, but the next morning it was normal. The following afternoon (26 hours after operation) it was 99°, but in the evening it was normal, and remained so afterward. After the first day the pulse also was normal. There were no signs of shock or after suffering of a severe character. The tumor weighed 34 lbs., and the patient was convalescent after the 18th day. In fact, manifestly gained in flesh before the end of the first week. The second case was even more remarkable, as the tumor weighed 55 lbs. The temperature reached 100° ten hours after the operation, the next morning it was normal, and, together with the pulse, remained normal afterwards. The patient was up for her meals the 11th day, and going about the house after the 14th. There were no symptoms of shock, no suffering, and not even a sign of tympanitis. The remarkable results obtained in these cases were due, Dr. T. believed, to the smallness of the abdominal incision. In neither case was it more than three inches in length, and in neither case were the intestines exposed to the air—in fact, in one case not even seen. The second point was the mode of securing the pedicle; as in all his operations, Dr. T. employed No. 20 shoemaker's white thread, and ligated the pedicle in small segments. The high temperature of the room, the atmosphere being saturated with vapor of water slightly impregnated with carbolic acid, was believed to have contributed to these favorable results.

Dr. SMITH read a lengthy paper on "*The A. C. E. Mixture, the best Anesthetic in Obstetrical Practice.*" The conclusions arrived at were as follows—1st A. C. E. is an effective general anæsthetic, producing as deep insensibility as chloroform. 2nd, Its action is rather more rapid than chloroform, but to develop its effects more of it is required, the proportion being about as 6 is to 4. 3rd. It produces a less prolonged second degree of narcotism than other anæsthetics. 4th, When its effects are fully developed the narcotism is very prolonged, and is reproduced with great ease. 5th, Its influence on the nervous centres is more uniform, and it creates little, if any, disturbance or break of action between the respiratory and circulatory functions. 6th, The final escape from the organism is rapid, so that the symptoms of recovery are sudden. 7th, In some cases, but very rarely, it produces vomiting. 8th, When it kills, it destroys by equally paralyzing the respiratory and circulatory mechanism.

Dr. KENNEDY had not seen the A. C. E. mixture used often, and in these few cases he was not favorably impressed towards it. He thought it would evaporate irregularly, the ether being more volatile, would go off first, and leave the chloroform and alcohol behind. He liked chloroform for midwifery practice and ether for surgical cases.

Dr. HY. HOWARD said he had used chloroform upon himself continuously for 48 hours for a severe attack of renal colic. He had also taken ether. He had no fear of either of them.

Dr. STEWART had never used the A. C. E. mixture, and believed the little alcohol in it could have no value as stimulus. Bichloride of Methyline had caused a good many deaths in the past ten years. The danger with chloroform did not arise from large doses. Statistics prove that often a small quantity has produced fatal results.

Drs. MCCONNELL, Mignault, Armstrong and Trenholme were well satisfied with chloroform for obstetrics and ether in most other cases.

Dr. BROWN said he had never seen post-partum hemorrhage follow the use of chloroform. He gave a few drops on a cone made with a towel or handkerchief, and only when the pain was on, giving a little more just as the head was passing the vulva. He found less danger from tearing if the head be pushed forwards and delivered with the thumb or finger in the rectum in the interval between the pains. He would use ether in placenta prævia, where there had been much loss of blood. Dr. Fordyce Barker advocates the use of chloroform in nearly all midwifery cases. Dr. Kingman of Boston could only find seven deaths recorded from chloroform in midwifery practice, and none from ether; still, we must remember how many more times chloroform is used than ether in these cases.

Dr. BULLER thought the A. C. E. mixture might be very useful. He believed with many that chloro-

form was better suited to young children and very old persons. He had used Bichloride of Methyline a few thousand times in the Royal Ophthalmic Hospital at Moorfields, and had seen deaths follow its use. He did not like it.

The PRESIDENT said he had taken a deep interest in anæsthetics, but had not seen the A. C. E. mixture used. In his surgery practice he now uses ether exclusively. During six years at the hospital that he had seen chloroform administered, they had no deaths, but he had seen some very narrow escapes. They used to give a draught of spirits before giving chloroform. With ether, one may do without an assistant; this is not justifiable with chloroform, except, perhaps, in midwifery practice. He thought ether was safer at all ages. He has seen dangerous symptoms follow chloroform, even in young children. Of course if he had to operate upon an old man with atheromatous arteries he might use chloroform, as the struggling which often follows ether would be dangerous. He considered chloroform administration in the dentist's chair very dangerous, the upright position causing the patient to be more liable to fatal syncope.

Dr. SMITH, while expressing his gratitude for the friendly criticism which his paper had elicited stated that had not, so far, heard anything to affect the good opinion he entertained for the A. C. E. mixture.

Dr. STEWART having remarked that Dr. Smith concluded that the A. C. E. mixture was safer than chloroform, because it only contained one-third part of chloroform, but that it was often the case that fatal cases of chloroformization occurred when only a very small quantity of the drug had been used, and therefore that the small quantity of chloroform in the A. C. E. mixture was no argument in its favor.

Dr. SMITH replied that it was precisely to meet such an objection as that, that he had devoted several pages of his paper to show that those cases of death were not due to the exceedingly small quantity of the anæsthetic, but to the condition of the patient's circulatory and nervous system at the time. It was a well-known proverb that by being united in marriage we halved our sorrows and doubled our joys, and so by uniting chloroform and ether we doubled the advantages and halved the dangers of each. Certainly chloroform was safer in midwifery cases than in any other, because the woman was recumbent, and, moreover, she was making expulsive efforts, which guarantee a plentiful supply of blood to the brain. But it could only be entrusted to a medical man: and where there was only one, and he had the forceps to handle, chloroform was admittedly a dangerous drug. Besides, it was not a drug that could be used very well during the first stage of labor, during which, however, some women suffer more than in the second stage. Alcohol killed by the head or by coma; chloroform killed by the heart or by syncope; ether killed by the lungs or by apnœa; but by adding the three together, and then only giving one-third the quantity, we obtained an average effect sufficient to produce anæsthesia, but remaining very far short of death.

Several of the speakers having called in question the usefulness of adding alcohol.

Dr. SMITH replied that alcohol was a very good anæsthetic as well as stimulant, and would have been used for that purpose in the form of vapor long ago were it not for the defect that it irritates the bronchial tubes when administered alone, but not so when mixed with chloroform and ether, the A. C. E. mixture being just as pleasant as chloroform to inhale. In conclusion, Dr. Smith said that he had so far only had occasion to use it in a hundred and ten cases, but that he would continue to employ it as long as he lived, and that perhaps, in ten or twenty years, he would have the inference of a thousand instead of a hundred cases. He did not pretend to be the discoverer of this combination, nor even to be the first person in America to use it; in fact, in reading the current literature of the day he frequently came across reference to this anæsthetic. Indeed, for all he knew to the contrary, there might be a hundred very able men who constantly used it, and yet who had not had the time, nor felt it their duty, to lay it before their professional brethren.

Stated Meeting, January 5th, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Rapid Growing Ovarian Tumor.—Dr. Trenholme showed a large semi-solid ovarian tumor which he had removed from a woman some days before. The patient, when she consulted him, was unaware that she had a tumor, but consulted him for severe abdominal pain, which had lasted some three weeks. She had only noticed a swelling for the last six weeks. Latterly, the tumor had grown very rapidly. It was removed without great diffi-

culty, though the adhesions were numerous, and the operation was complicated and prolonged by the bursting of a cyst. The pedicle was broad, and as is his custom, he ligated it in sections with shoemaker's thread. The patient's temperature rose to 101° the day after operation, but soon fell to normal, and remained there.

Dr. SHEPHERD mentioned that a short time ago he had operated in a case of ovarian tumor (in a childless married woman aged 29), with a history of only eight weeks' growth. The patient was seen by Dr. R. P. Howard a month before the operation, and at that time the tumor was of small size; it grew very rapidly, and in three weeks was quite large. At the time of operation, it was doubtful whether this rapid increase was not due to ascites. However, it proved to be a single ovarian cyst, with a solid base, containing 20 pints of thick fluid and weighing some five pounds. The patient did well, and was able to return to her home in four weeks.

Undeveloped Bones in an Idiot.—Dr. R. L. MacDonell showed the bones of the lower extremity of an idiot which had been sent to the dissecting-room of McGill University from one of the institutions of the city. The individual was said to be 20 years of age, and had never spoken or walked. The bones, although of good length, were remarkably small, the femur not being thicker than an ordinary sized finger. The hip-joints were ankylosed in the flexed position, and there was contraction of the knees. The muscles of the lower extremities were strings of fibrous tissue with a little muscular tissue about them. The head, although somewhat microcephalic, was of good shape. In both femurs there was a well-developed third trochanter.

Dr. Hy. HOWARD said such cases were common in all lunatic asylums.

Hemorrhage into the Pons Varolii.—Dr. R. L. MacDonnell read the history of a case of hemorrhage into the pons Varolii. An old man, aged 62, was admitted into the General Hospital on 31st July, 1885. He had been picked up by the police in the streets, and was in a semi-unconscious condition, unable to communicate anything whatever regarding his history. He was a tall, thin man, very anæmic, with wasted and flabby muscles. His expression was dull and listless, and though he could utter words when spoken to, he was by no means rational. The pupils were equal, but the left was more sluggish than the right. There was slight paresis of the left side of the face, and the right side of the body was weaker than the left. There was increase of the superficial reflexes, but normal patellar reflex. The urine and fæces passed in bed; he was always in a semi-comatose condition; pulse 90, and feeble. On the 3rd of August, his breathing was stertorous, the paresis of the left side of the face more marked, and coma more profound. Next day the coma was complete, pupils contracted and unequal; large, moist râles heard at the basis of both lungs; toward evening he died comatose. The brain alone was examined after death, when a fresh clot was found in the pons Varolii, occupying the posterior or lower part, and situated rather more to the left than the right side. Dr. MacDonnell remarked that the central situation of the clot was shown by the equality of the paralysis on either side, and the greater weakness of the right side being accounted for by the position of the clot. It was a case of alternate hemiplegia, the left side of the face being paralyzed, though to a slight degree. This is characteristic of pontine hemiplegia, especially when the lower half of the pons is injured, though usually the fifth and sixth nerves are also involved. There was nothing distinctive in the condition of the pupils, which were not, as usually described, contracted, but merely sluggish in their reaction to light. In hemorrhage into the pons, one of two opposite condition is usually observed: contraction of the pupils when the lesion is sudden and situated in the upper part of the pons, causing irritation of the nuclei of the third nerve; and dilatation from complete invasion and destruction of these nuclei.

Dr. Hy. HOWARD asked if, at the post-mortem, the ruptured vessel had been found, as it was most important to know exactly the source of the hemorrhage.

Dr. WILKINS related a case of very extensive hemorrhage into the pons, where the patient lived for eight days.

Dr. STEWART asked if the whole of the left facial was effected, or only the respiratory branches?

Dr. MACDONNELL, in reply, stated that the ruptured vessel had not been found, and that the whole of the facial was paretic.

Cerebral Syphilis.—Dr. Geo. Ross reported a case of supposed cerebral syphilis, which had occurred in his wards in the General Hospital since his paper on that subject was read before the Society. The patient died a few days after admis-

sion, and a post-mortem was obtained. He came into the hospital complaining of very severe pain in the head and vomiting. In a day or two he was quite maniacal, and then gradually became comatose. He died comatose five days after admission. At the post-mortem Dr. Wyatt Johnstone found at the base of the brain a single small flake of recent lymph, lying on and attached to the inferior surface of the facial nerve in the right side, near its origin. On slitting up the vessels at the base, this exudation was seen to correspond to a small lateral branch of the basilar artery, where it crossed the nerve. The thrombus extended in this vessel as far as its origin from the basilar, at which point a small roughened, reddish patch existed in the intima, and its wall was thickened, but no thrombus present. The right posterior cerebral artery presented a thickened wall and narrow lumen, and was thrombosed in its whole course; other cerebral vessels normal. On dissecting the brain, no local degenerative changes were recognized anywhere. Dr. Ross remarked that it was singular that such apparently simple lesions should produce such grave symptoms. He had expected to find much more marked pathological changes in the brain.

Erysipelas in Infants treated with Zinc Paste.—Dr. A. D. BLACKADER read a short paper entitled: "Notes on some cases of Erysipelas in the Infant, with a plea for the use of white zinc paint in its local treatment." Brief reports of the cases were given; the last two of which had been treated by the application of white zinc paint over all the erysipelatous surface, in the manner recommended by Mr. Barwell with white lead. The same advantages were claimed for the zinc as had been for the lead, without danger of absorption of any poison which, in infants, was perhaps to be feared with the latter. These were immediate relief to pain and restlessness, followed rapidly, as a rule, by subsidence of pyrexia and arrest of the disease. The fact that erysipelas was a constitutional and not merely a local disease was not overlooked; but it was contended that if by these local measures we moderate and assuage the local inflammation, we, at the same time, control at least some of the factors in the systemic disorder. Special advantages were claimed for it in infants. It is easily applied, drying quickly, and forming a complete dressing by itself, which cannot be soiled by the secretions, nor easily rubbed off by the restlessness of the infant. If desired, some disinfectant may be added. Soap and warm water readily remove it after the attack is over.

Dr. HINGSTON said that he had had himself repeated attacks of erysipelas of the face. He foundt nothing so comforting as frequent dusting with a puff of flour. He believed that when the system was in ill-health the disease spread; if not, that it would not do so.

Dr. TRENHOLME said he had never seen an infan die of erysipelas. He employs a paint of elderberry tea thickened with calcined magnesia.

Dr. Hy. HOWARD said that last winter there were between fifty and sixty cases of erysipelas in the Longue Point Asylum. All were treated by painting with a weak solution of iodine, and all recoverd.

Dr. SMITH said he had seen marked effects produced by one grain doses of quinine given every three hours.

The PRESIDENT said that a favorite prescription for cutaneous erysipelas with the late Dr. Fraser was the oxide of lead and glycerine. He himself uses a lotion of lead and opium, usually warm, but sometimes cold. He believed that great benefit followed the internal use of the tincture of iron in large doses. Patients have a tolerance for it. His usual dose for an adult is 40 minims of the tincture with 5 or 10 of chloric ether every four hours.

Extensive Posterior Cervical Laceration of Os Uteri.—Dr. ALLOWAY related the following case, and illustrated by means of diagrams an extensive posterior laceration of the cervix uteri of long standing, and also demonstrated the operation performed for its cure:—

On the 17th of June last he was requested to see a lady stated to be in a dying condition. He found the patient in a hysterical fit lying on her back in bed, making most exaggerated respiratory efforts —"gasping for breath,"—pulse and temperature normal, but seemed unconscious of his presence. Gave her a hypodermic injection of morphia, and assured her friends that she would not die. At the morning visit next day he obtained the following history: She was 48 years old; had given birth to eight full-term children; one miscarriage at third month about ten years ago; oldest child 25 years of age, youngest 14. She stated she had not been able to do her house-work for some years past. She suffers from intense pain in the back, limbs and head. Has constant irritation of bladder. States that when young she was an exceptionally strong and robust woman, but for some years has been gradually losing flesh. She takes "nervous fits or spells" somewhat like the one in which she was found the day previous. These spells come

upon her without warning, and have been increasing in frequency of late years. Her attendants and friends become greatly alarmed during the attacks, which gives her the appearance of being in a dying condition. She has been treated "for heart disease," liver complaint,' epilepsy, passing of gall-stones, ' ulceration of the womb,' and a host of other maladies, without benefit. She suffers from intolerable attacks of indigestion, reflex pains in almost every part of her body, particularly her head, back and sides. She spends nearly all her time in bed, and carries a mixture of bromide and another of laudanum to make her condition tolerable. Her menstrual function is still active, but irregular; the flow has always been until the last year, very excessive in quantity, and accompanied with pain. On vaginal examination, the pelvic peritoneum and parametric cellular tissue are found quite free from callosities or other evidences of past inflammation. The uterus is freely moveable, and all pelvic parts painless to the touch. The vaginal walls are normal: the uterus is acutely anteflexed. If the perineum be now well-retracted by Sims' speculum, a very odd-looking, large tongue-like body is seen hanging down two inches and a half into the vagina from the vault above. In searching for the external os, none can be found, but high up on the posterior surface of this cervix-like body, about half an inch from the vaginal vault, the sound suddenly passes into an opening and disappears forwards to the depth of about two and a half inches. On carefully examining this peculiar cervix, the anterior surface appears to be of the normal squamous epithelium of the portio-vaginalis exterior, while the posterior surface has the microscopic appearance of the gland tissue lining the cervical canal. The case now appeared to be an extensive posterior laceration of very long standing. Hypertrophy had taken place from the advanced state of cystic degeneration and other chronic changes consequent upon constant and long-continued irritation to which the exposed gland tissue had been subjected. The operation for the cure of the lesion consisted in making a long horse-shoe shaped denudation three-eighths of an inch wide and very deep, so as to excise as much cicatricial and cystic tissue as possible, and then drawing the edges together by six wire sutures, rolling the denuded edges of the cervix inwards upon its longitudinal axis. In this way the cervix was reformed back to its normal condition and shape, the external os being formed at the apex of the body of the last suture. Union was complete throughout; the sutures were removed on the tenth day. The convalescence was slightly protracted from debility, but the patient is now in perfect health, and takes a great deal of exercise. She is free from pain, dyspepsia, and "nervous spell." She is no longer troubled with her heart or liver, *and has not passed any more gall stones.*" The flow has returned two or three times since operation, but when last heard from she stated that seven weeks had elapsed since her last period; probably the menopause had set in.

Dr. ALLOWAY drew attention to the extreme rarity of this lesion. Emmet states that of 164 operations, only 4 were for posterior laceration. Goodell, in 113 successful cases, records no posterior laceration; and in no other reliable authority can he find reference to this rare lesion. Emmet supposes that when it does occur it heals spontaneously, but that it often causes parametric inflammation, with cicatricial bands and retroflexion resulting.

Salivary Calculus.—Dr. Hingston exhibited a salivary calculus which had ulcerated its way out of the sublingual duct. The patient had been sent to him to be operated on for supposed malignant disease. The parts about the floor of the mouth were greatly inflamed. This condition had lasted for months.

Dr. JAS. BELL said that some time ago he had removed a similar calculus from Wharton's duct. The patient had been sent to him from the country to be treated for cancer in the mouth.

Dr. SMITH mentioned having removed last year a phosphatic calculus from the tonsil 1¼ inch long.

Stated Meeting January 22nd, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Pathological Specimens.—Dr. WM. GARDNER exhibited the following specimens: 1. *A Fibrous Polypus of the size of an orange*, removed from a woman aged 48. The growth hung in the vagina, and was attached along the whole length of the posterior walls of the uterus. The patient was blanched to translucency by hemorrhage, which had lasted almost constantly for five years. She made a good recovery. 2. *Two diseased Ovaries* slightly enlarged and cystic, being the second ovaries respectively from two cases of ovariotomy—the tumor in one case being a unilocular ovarian cyst; the other the ordinary multilocular cyst.

toma. In each case the uterus was enlarged and retroverted. Menorrhagia had in both been a prominent symptom. In such cases, where the second ovary is diseased, the question arises as to what should be the proper treatment when a part of the ovary seems healthy. Schroder has recently published reports of a number of cases in which, instead of complete removal, he has excised the diseased tissue by a wedge-shaped incision and brought together the cut surfaces by sutures. The object in such cases is to permit, if possible, subsequent conception. Dr. Gardner was not aware, however, of conception having occurred under such circumstances. Doubtless, however, after ovariotomy, the second ovary has often been unnecessarily removed, as slight enlargement and a cystic condition do not necessarily imply a condition which shall develop into an ovarian tumor requiring the ordinary operation. The responsibility on the part of the surgeon in dealing with such conditions appears to assume a new aspect in the light of Schroder's experience.

The PRESIDENT said that one objection to a woman becoming pregnant after this operation was that sometimes the abdominal walls give where the incision had been. He had seen this occur once, and produce hernia of the pregnant uterus.

Dr. ALLOWAY said he had attended this woman in her confinement, and had great difficulty in keeping the womb in proper position: it came through the abdominal walls and stretched the integument greatly. She has to wear a pad constantly to keep the abdominal organs from coming through.

Dr. GEO. ROSS said that the first woman upon whom he had performed ovariotomy was told by some of her friends that she would be barren. In twelve months' time she became pregnant, and although the case was one of breech presentation, and although the wound could not heal by primary union, a clamp having been used, still she had no trouble in her labor.

Dr. SHEPHERD said that if the wound healed by granulations, it ought to be all the better.

Cerebellar Disease.—Dr. WILKINS read a paper on "Cases of Cerebellar Disease."

Dr. STEWART asked Dr. Wilkins what were his reasons for considering the second case to be cerebellar and not cerebral; and why hemorrhage?

Dr. WILKINS, in reply, stated that the sudden nature of the death and the symptoms immediately preceding it pointed conclusively, he thought, to interference with the respiratory centre in the medulla. The state of perfect health up to, at the most, three days preceding death, and the sudden onset of the symptoms, pointed to hemorrhage. Had this hemorrhage been into the cerebrum, there would have been other symptoms present, according to the region affected; if into the anterior portion, there would most likely be some psychical symptoms; if into the motor ava, some motor phenomena would be expected to be present; if into the posterior portion, there would probably be some sensory symptoms. Further, persistent vomiting is more frequently present in cerebellar lesions, or lesions in its immediate vicinity.

Dr. GODFREY asked if any of the members had bled for cerebral hemorrhage. He had once done so, with favorable results. The diagnosis was verified by an autopsy made a few months later, the man having been killed by falling off the roof of a house.

Dr. Hy. HOWARD said he had bled for everything. Years ago he had bled as many as forty persons in a morning. The last time he had used his lancet was seventeen years ago, on a man who had an attack of apoplexy. He got well, but had right-sided paralysis for the rest of his days—ten years.

Stated Meeting, Feb. 5, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

PATHOLOGICAL SPECIMENS.

Two Cases of Tait's Operation.—Dr. Trenholme exhibited two pairs of ovaries and tubes. The ovaries were all enlarged and diseased. In the first case, one pair were removed from a woman aged 23 years, who, since she began to menstruate, had dysmenorrhœa. Some years ago her menses were stopped by a cold bath, and each month since then she has suffered from epileptic attacks at this period. In spite of bromide of potassium, etc, these attacks were getting worse. An examination revealed enlarged ovaries. The operation for their removal was the most difficult he had had. There was an enormous amount of adipose tissue in the abdominal walls, and the recto-muscles were very tense. The right tube was free, and disposed of. The left tube looked at first like a multiple or lobulated ovary from old inflammatory constructions. This tube and ovary were bound down by aphesions all around, and covered over by the adherent omentum. After the operation, the patient had a

severe attack of peritonitis. This was treated by hot fomentations, large doses of opium, and injections of linseed tea. She complained of intense thirst, and as she appeared to be almost dying, she was allowed cold water *ad libitum*. The wound, which was nicely closed, was torn open on the third day to allow vent to some exudation. No drainage was used. The patient recovered, and has had no convulsions since. The ovaries were about the size of bantam's eggs, and cystic.

In the other case the appendages were removed from a woman who had suffered ever since she began to menstruate, 14 years ago. Was married ten years, and had one child. She has suffered from almost continual pain aggravated each month. Pain began one week before her period, and continued for a week after, leaving her only five days free. On examination, the uterus was found four inches deep and the ovaries enlarged. The right ovary had a projection like a teat on it. The operation was performed a week ago, and the patient is doing well.

Intra-uterine Myoma.—Dr. William Gardner exhibited the specimen and related the case. Patient, aged 32, was sent to him by Dr. R. T. E. McDonald of Sutton, October 15th, 1885. She had been married 13 years, and had had one child eight years after marriage. She suffered from profuse and painful menstruation at intervals of three weeks. An examination revealed the cause. Removal of the appendages was thought of, but ergot and astringents at the period was tried. She returned three months later with a history of increased hemorrhage. She now was extruding shreds of the fœtid tumor, probably from the action of the ergot. She also had had chills. It was decided to at once remove the myoma. The cervix was first incised with the thermo-cautery, and by means of a pair of scissors and the serrated scoop the whole was removed. A double drainage-tube was then inserted, and sutured to the cervix. Irrigation of weak carbolic solution was used every two hours. Twenty-four hours after the operation the temperature rose to 102° ; irrigation was now constantly used till the temperature fell. Some days after, the suture sloughed away and the tubes came out, causing the temperature to again rise. After this a single tube with a cross piece at the end was used, thus making it self-retaining. Patient made a good recovery. Dr. Gardner laid great stress upon the necessity of frequent irrigation in these cases. Mr. Tait used to lose 5.0 per cent. of these cases, and now his rule is to remove the appendages. He once had to operate hurriedly at night to relieve alarming symptoms caused by the os being plugged with an extruding and sloughing myoma. The patient did well.

Dr. STEWART asked what caused the tumor to slough.

Dr. GARDNER said that no doubt it was due to its being rapidly starved by the effect of the ergot on the uterus.

The PRESIDENT said he could testify to the necessity of free irrigation in these cases. He had charge, during a temporary absence of Dr. Gardner from the city, of two of these case of his, and noticed that if by any accident the tubes came out, the temperature went up.

Dr. TRENHOLME related a case of post-partum hemorrhage occurring in a patient of his. On introducing his hand, he found a tumor about the size of an orange. By the aid of ergot and gallic acid the bleeding was arrested, but when three months pregnant, she lost about a cupful of pus. A week later she aborted, and now no tumor could be felt. She has had two or three children since. He had removed uterine myomata successfully without the use of drainage-tubes, but now believed they should always be used.

Salivary Calculus from Steno's Duct.—Dr. A. L. Smith exhibited the specimen removed by him from inside the cheek. After its removal a thin inspissated fold came away.

"Weid" or Ephemeral Fever.—Dr. Kennedy read a paper on this subject. He had met with several severe forms of weid whilst in charge of the obstetrical department of the Western Hospital. He looks upon weid as being more than an exaggerated milk fever, and something entirely apart from puerperal fever. Dr. Kennedy defines weid as a specific ephemeral fever occurring in women of nervous temperaments during the earlier periods of lactation, commencing by severe chill and ending in profuse diaphoresis, such attacks seldom exceeding 24 or 36 hours. As one diagnostic sign, the chill invariably commences in the back, between the shoulders—patients will often indicate the exact spot,—and from there it rapidly extends over the entire body. Older authorities gave this subject some importance, but modern authors consigned it to oblivion as a "legend no longer to be believed in." Our improved treatment of lying-in patients gives fewer opportunities to observe such cases. The different views as to its

causation were given. Dr. Kennedy did not believe in its being of septicæmic origin, nor of its being merely from distended breasts, but analagous to the rigor and fever occurring after an amputation or passage of a catheter. The after-stages, especially the profuse diaphoresis, indicate also deep impressions made upon the vaso-motor centres. A report of a typical case was read.

Dr. CAMPBELL said it was a long time since he had seen a case of weid, but had many cases years ago. He thought that women were better housed and nursed now-a-days. He believed it was usually induced by a sudden chilling of the body, and was easily diagnosed.

Dr. SHEPHERD looked upon this condition as simply inflammation from retained secretion, similar to what is seen after amputation, if the secretion is pent up.

Dr. SMITH said he did not like the names ephemeral fever or weid; he thought milk fever better. He tries to avoid this trouble by putting the infant to the breast soon after delivery.

Dr. CAMPBELL insisted on the infant being kept from the mother till there were signs of milk in the breasts.

Dr. GARDNER said that some German authors call the disease known as weid late puerperal fever. It is due to a variety of causes. Often it is seen from the 7th to the 14th day, from cold, gastric disturbance, or nervous influence, and frequently it is due to septic poison, auto-infection, caused by the breaking down of clot in a sinus or from abrasion of the genital tract. He said that putting the child to the breast early powerfully favored involution of the uterus.

The PRESIDENT said that the septic poison might not come from the genital tract at all, but be from a minute quantity of pus retained in the breast gland. He had seen death follow septicæmia caused by a drop of pus under a corn on the foot.

Stated Meeting, February 19, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Uterine Fibroid.—Dr. TRENHOLME exhibited a large uterine fibroid which he had removed the previous week from a woman aged 33. Patient, who was married and had borne children, had suffered from symptoms of fibroid for some sixteen years, and as the hemorrhages were becoming more severe, had requested that an operation should be performed. Dr. Trenholme consented, and performed the operation. The tumor was encircled by a wire écraseur one inch above the os uteri and removed; there was considerable hemorrhage, which was difficult to control. The patient never rallied from the operation, but died seven hours after from shock.

Sarcoma of Spleen in a Dog.—Dr. W. JOHNSTON exhibited a specimen of angeio-sarcoma removed from a dog. The tumor weighed 4 lbs., and was continuous with the upper end of the spleen substance. The dog suffered from abdominal dropsy, for which he was tapped, and died of peritonitis a few days subsequently.

Large Urinary Calculus.—The PRESIDENT presented a large uric acid calculus which he had recently removed from a man aged 69, by the lateral operation. The stone weighed 3¼ ounces. The patient had suffered from symptoms of stone for five years, and had been frequently sounded without result. The man recovered from the operation without a bad symptom.

Dr. HINGSTON said he took exception to Sir Henry Thompson's statement that if a stone be over 3 ozs. weight it must lacerate the neck of the bladder. The supra-pubic operation, which appears to be much simpler than the lateral method, had not as yet been performed in Lower Canada. He preferred the lateral operation.

Dr. SHEPHERD quoted a case where a German surgeon had attempted the supra-pubic operation, but finding the peritoneum came down abnormally low he sewed up the wound, performed the lateral operation, and the man did well. However, he believed that the supra pubic operation was the operation of the future for large hard stones. It had been practised with brilliant success by the leading surgeons of France, Germany and America, and now was being adopted by the most conservative of English surgeons.

Dermoid Cyst.—Dr. Wm. GARDNER presented two specimens, and briefly narrated the case:—

Case 1.—*Dermoid cyst containing a bunch of hair, two well-formed incisor teeth, and one bicuspid tooth attached to a piece of bone, also a fourth tooth in another part of the cyst wall.*—The fluid contents contained a large quantity of fat, and on cooling looked like drippings of meat. The other ovary was an aggregation of cysts, and was also removed. The patient, an unmarried lady of 30, had noticed the tumor for only four months; she had had several attacks of pelvic pain in the side on which was the tumor. She made a rapid

and easy recovery, leaving for home on the eighteenth day.

Case II *Tait's Operation*.—Uterine appendages removed from a case of uterine myoma. Both ovaries consisted of a mass of smooth cysts, and were three times the normal size. The tubes were healthy. The myoma was as large as a child's head. The patient had been married three years, and had never been pregnant. She was much blanched by hemorrhage and watery discharges, which had lasted for five years. She had suffered from fever, abdominal distension, and profuse metrostaxis after the operation, but at the date of the meeting (eleventh day) was doing perfectly well.

Dr. GARDNER said that since September last he had had nine successive successful cases of abdominal section; eight were ovariotomies and one removal of uterine appendages. Of the eight ovariotomies, two were for dermoid cysts. In four of the cases, the second ovary was also found diseased, and removed.

Malignant Stricture of the Œsophagus.—Dr. Geo. Ross showed a specimen of cancer of the œsophagus, the following being the principal facts in the clinical history: A man, aged 54, 6 feet 4 inches high, and who had been immensely powerful, was admitted into the hospital with intense dysphagia and in a state of great emaciation and weakness. There was an intense fetor of breath, and he had had a severe cough for some time, with a copious similarly fœtid purulent expectoration. He was intemperate, and was in the habit of drinking raw spirits. The difficulty of swallowing had gradually developed during more than a year, until of late even fluids were forced down with the greatest difficulty and straining. There had never been any vomiting or regurgitation of food. An œsophageal bougie of soft, flexible rubber, and of almost the largest size, was twice passed its full length without meeting with any special obstruction. It slid down with ease, and not the slightest force was used. The withdrawal of the bougie was followed by the escape of horribly foul air from the patient's mouth, and the instrument itself was smeared with stinking pus. Physical examination of the chest gave signs of cavity in left apex and of softening deposit, with cavity, localized in right mammary region. He rapidly became enfeebled, and died in about a month from asthenia, continuing to the end to swallow a large quantity of fluids every day, and there was never seen any regurgitation. The diagnosis had been established at the œsophagus involving the latter in such a way as to produce all the phenomena of stenosis, and yet permit of considerable patency of the lumen; secondary cancer of the lungs with gangrene. The autopsy showed an epithelioma of unusually firm texture situated just below the level of the cricoid cartilages and involving for about two inches. It encircled the œsophagus, and the stricture was almost impermeable. It was only after repeated efforts that a No. 2 flexible gum-elastic catheter could be manœuvred through it. In the apex of the left lung was a large cavity containing a considerable quantity of foul-smelling pus, the chamber was excessively dense. The upper part of the lung was firmly adherent to the diseased portion of the œsophagus, but no communication could be shown between the pulmonic and the apex cavity. In the front of the right lung was a mass of cancer which had softened centrally.

Dr. Ross directed attention to some points of the case. He thought the disease might here have originated from the habit of drinking copiously of raw spirits. The absence of all regurgitation was a remarkable feature, considering the high situation of the growth and the rigidness of the stricture. He also asked the question: "What course was taken by the bougie?" The tight, firmly organized stricture must have existed for a long time; such a large instrument could not possibly have passed through within two or three weeks of the man's death. The bougie was too large, the space too narrow, and the structure too high for it to have been upon itself. Could it have passed into the cavity in the apex of the lung? If so, there must have existed a direct and free communication with this part from the pharynx, which avenue had been subsequently shut off by adhesive inflammation. Except on the latter hypothesis, he was at a loss to explain the facts given above.

The PRESIDENT inclined to the belief that the bougie went down to the stomach, and that since it had been introduced, a few weeks, the growth had increased, producing the high stricture shown.

Malignant Disease of the Rectum treated by Excision and Colotomy. Dr. Geo. E. FENWICK read a paper on this subject.

Dr. HINGSTON advocates operating if the disease be confined to the bowel; if it does, he prefers colotomy. He has noticed that malignant disease of the rectum does not return so soon as when in the mammæ.

Dr. SHEPHERD said that Dr. Fenwick was to be congratulated upon the results of his operations. He remarked that many continental surgeons removed the coccyx so as to get more room; indeed some remove also the sacrum for this end.

The PRESIDENT said that as a rule colotomy was a much more satisfactory operation when performed for syphilitic stricture than for cancerous. The treatment for syphilis of the rectum progressed better when that bowel was given a rest.

Progress of Science.

BELLADONNA—SOME OF ITS THERAPEUTIC USES.

Dr. P. N. Cilley thus writes in the *Virginia Medical Monthly*. This drug has been selected as the subject for discussion, with no intention on my part to present an elaborate disquisition upon the philosophy of its action, or of even naming but a few of its most prominent virtues, and elucidating its most important effects on the human system. This I will endeavor to illustrate and make clear by mentioning some cases in which I am satisfied it was eminently useful in my hands. My impression is that it has been too much neglected by the profession generally; and my belief in it as an extremely valuable medicinal agent is my excuse for calling attention to it.

I will first report a case of *obstruction of the bowels*, and the treatment employed.

In 1880, immediately after having eaten a hearty meal, while rolling a caskful of corn on its chine across my crib, I was subjected to a sudden, violent twist and wrench of my whole body, requiring a tension of all the abdominal and lumbar muscles to prevent the cask from falling. On the instant of this wrench I experienced a sharp, stabbing pain in the central and outer part of the right hypogastric region. This pain continued very severe, and in a few minutes I was compelled to go to stool, and had a full natural action.

Partial relief from the pain followed the action, but in a short time nausea and faintness set in. Desiring to rid the stomach of its contents, I took an emetic of mustard, which acted freely, but immediately on its action the pain returned.

A rupture was suspected, but a critical examination by my physicians, Drs. Buse and McBee, did not confirm this expectation, but satisfied them of the existence of an obstruction, probably an invagination, or intussusception of the large bowel at its junction with the small intestine. Probably the violent muscular contraction at the moment the trunk was twisted upon itself—the stomach being distended with food—forced a portion of the bowel within an adjacent portion, perhaps the smaller within the larger at their junction—this displacement naturally setting up spasmodic contraction and constriction of the invaginated parts.

A small tumefaction, easy to move, speedily showed itself at the point of pain, not being very sensitive to touch at the outset, but increasing in tenderness on pressure as its size increased. From the moment of its development until its removal I am confident no fæcal matter passed through that point in the bowels.

Anodynes, cathartics, enemas, poultices, hot and cold applications, and a large list of remedies, general and topical, were brought to bear on that slowly-increasing tumor, but it held forth against them all; so I will not particularize.

Everything taken into the stomach was speedily rejected, and all enemas were quickly returned.

Local applications doubtless retarded inflammatory action, and anodynes lessened sensibility to pain, but all failed to open this obstructed viaduct.

Large injections of warm water were thrown slowly into the bowels by means of a Davidson's syringe, in order to fill and distend the colon up to the point of obstruction, and thus, if possible, lift off the contracted envelope; but when the fluid began to impinge upon the irritated mucous membrane, there was not strength in my muscles sufficient to resist the violent ejectment of it, and the resulting pain was intolerable.

In the first stages of such an attack, after the spasmodic action of the muscular tissues has had time to abate, and before irritation and inflammation have been set up, I feel assured this form of treatment might often be pushed to success; but, in the more advanced stages, when the tumefaction is well marked, and the integrity of the tissue perhaps involved, I apprehend danger of rupture in using much pressure. In my case I will not say it gave no aid to the other means used, for possibly, notwithstanding the increase of suffering, it paved the way for more effective action of other remedies.

I was attacked on Monday morning, and these enemas were used on Wednesday and Thursday. On the latter day three drops of croton oil were given but rejected by the stomach instantly.

Later, on Thursday night, a plaster spread with Tilden's extract of belladonna, four by six inches in size, was applied to the right side of the abdomen and kept there. At 2 o'clock p. m. Friday, the surface about the umbilicus and in the right hypogastrium was rubbed with three drops of croton oil, and a plaster of belladonna applied to the entire surface of the abdomen; and five hours latter, eight drops of the croton oil were well rubbed in, and the belladonna again applied, with a warm poultice over it.

At 9 o'clock p. m. on the same day, I discovered for the first time the acrid taste and roughness in throat, characteristic of the belladonna, and, half an

hour later, the small bowel for the first time since the accident set up persistaltic active accompanied by borborygmus. This rapidly found its way down to the obstruction, where a sensation of tugging or pulling became manifest, with a well marked sensation of slipping in the bowel at the invagination; and I as distinctly felt the inner fold drawn out of the embrace of the outer as I do now my finger drawn out from the grasp of my other hand. I thought I knew what pain was before this, but the slipping of that bowel, each time it moved had such a world of anguish in it as I never felt before, and hope never to experience again.

The bowels were speedily moved, discharging a dark fluid, extremely offensive. Hypercatharsis had now to be guarded against by anodynes and stimulants, and irritation subdued by topical and other remedies, and I was soon on my feet again; but for a year I could not sit in the saddle without pain.

What relieved me, and how? Was not the belladonna an indispensable integer in the cure? We all know it has a wonderful effect in relaxing muscular tissue, and combating irritative contractility of muscular fibre, by paralyzing the motor nerves. Here was wha we desired to unfasten—this grip of the bowel upon itself.

Then, again, it is well understood that belladonna in moderate effect increases peristaltic action by paralyzing the inhibitory nerves which control the intestinal function: might not this increase of peristalsis have been sufficient to untie the knot without the aid of croton oil?

And further, we know that through its paralyzing the peripheral vagi (the inhibitory nerves of the heart), it increases the heart's action, gives more *vis a tergo*, sends a more powerful current through the arterioles into the venous capillaries, establishing an exaltation in the venules. Now, what more reasonable conclusion is to be presumed than that under this exalted circulation, the invaginated and constricted coats of the bowel should have their depressed circulation increased, their lost vitality restored, and their natural functions re-established?

Perhaps the croton oil, carried into the circulation by absorption, was just at this juncture calculated to set up violent peristalsis and open the *primæ viæ*. Had not relief come when it did, I should have insisted on having the cavity of the abdomen opened, and reduction attempted by taxis.

In all such protracted cases, when the bowels are moved, the practitioner should carefully guard against excessive purgation and prostration.

Many years ago, I treated in the same year two cases of obstructed bowels, both young negro men. Belladonna was the leading remedy, and in both the obstruction was removed. The one, in the care of a vigilant master, strictly conforming to directions, made an excellent recovery; but the other, left to the tender mercies of a careless overseer, was neglected, no support being given, and, after long and violent purging, sank and died.

But warm water injections, croton oil, and belladonna, will not cure all cases of obstruction of the bowels. I believe the belladonna more useful than any other remedy, and I have used it locally and internally; but under favorable circumstances, the former method has my preference. I give the solid extract in half grain doses every hour, until the acrid taste and dilating pupil warn me to discontinue it.

Belladonna is an admirable assistant in the reduction of *strangulated hernia*. Apply the soft extract freely to the strictured neck after softening the surface with warm water, exercise a little patience, and then, grasping the sack with both hands, gently compress it, drawing it away from the neck, swaying it from side to side; and, take my word for it, in nineteen cases out of twenty of recent strangulation, the bowels will be speedily returned—especially if you elevate the hips and relax the abdominal walls.

In *spasmodic stricture of the uterus or urethra*, and in the passage of calculi through these ducts, I have seen speedy relief result from the use of this drug, applied locally, or given internally either by the mouth, rectum or urethra.

In *strangulated hemorrhoidal tumors*, where those oft-repeated spasmodic contractions of the sphincter ani are causing so much distress, nothing can surpass, in promptness, the relief procured by a liberal application of the extract of belladonna to the anus and perineum, after softening the parts with warm water to facilitate absorption. Nor is this relief palliative alone. If given in half-grain doses once, twice, or three times a day, as may be necessary to keep the bowels open, it will permanently cure many cases.

In two cases of *paraphymosis*, it allowed easy reduction, where the knife would have been a terror. Intelligent effort at reduction had been previously used in vain. The extract was applied locally.

In *inflammation of the iris*, or any other portion of the eye, the local application of belladonna should not be neglected, as it prevents or breaks up adhesions that would impair vision. It may be applied around the eye, or a solution may be dropped in the eye, and a cloth dipped in the solution may be applied over the organ.

But the trouble in which I regard it as a remedy, *par excellence*, is in protracted *labor, with rigid, thin, partly dilated os*, where the patient is worn out, irritable and nervous from long continued, short, and sharp cutting pains. From the time of the first masters until now, thousands of plans have been devised to relieve this distressing complication; many of these plans are useful; most of them will relieve if persisted in long enough. But in belladonna I offer one agent that has never failed in my hands to produce a speedy change. With a little of the soft extract on my index finger, I smear it on the os uteri, both without and with-

in heavily, for an inch or more in width all around the ring. But should any obstacle interpose to render its application difficult by the finger, the extract is dissolved in a little warm water, and applied by the aid of a vaginal syringe. The application of the belladonna may occasionally require one or two repetitions, at intervals of half an hour. In most cases, however, before the expiration of that time, the ring suddenly becomes soft and thickened, yielding kindly to the pressure of the head: dilatation occurs with wonderful rapidity, the pains become protracted and expulsive, the nervous irritability subsides, the patient returns with alacrity to the task in hand, and a speedy delivery is the result.

Nor is it less useful in a *rigid perinæum*, if smeared on the parts. But strict care should be observed to support the perinæum through every pain, as the dilatation occurs so suddenly, and in most cases commences to develop its effects at the posterior margin of the perinæum before the meatus is impressed; and in this condition a violent pain might cause the head to pierce the perinæum and tear its way through. I am not quite sure but a free use of belladonna increases liability to post partum hemorrhage. This should be guarded against.

In *dysmenorrhœa* belladonna is eminently useful, especially in that form of it dependent upon a constriction of the cervix and os uteri, a narrowing of their canal, and a dense, hardened and unyielding condition of their tissues. It was extensively used by my preceptor and former partner, Dr. H. V. Wooten, and subsequently by myself, in the formula recommended by Drs. Cartwright and Holmes, of Mississippi.

B. Powder camphor .....135 grains.
Extr. belladonna ..... 27 "
Sulph. quinine..... 27 "

Mix and make seventy-two pills.

On the incursion of the pain give one of these pills, and repeat it every half hour until the violence of the attack abates or a pungent, acrid taste in the throat, resembling tobacco, and dimness of vision, from dilatation of the pupil, warn the medical attendant of the development of the effects of the drug, and point to the propriety of its discontinuance. Relief from pain will surely follow. Occasionally, but not often, the pain returns before the close of that catamenial period, and if so the pills should be repeated. So pointed is the relief from this preparation, that several of my female friends are unwilling to meet these periods unless provided with this combination or some modification of it.

Belladonna often disappoints the profession, because of the carelessness or dishonesty of druggists. Be sure you have a reliable preparation, fresh and pure, and you will find it will do all, and more, than I have claimed for it.

THE SPECIFIC TREATMENT OF DIPHTHERIA AND CROUP.

Dr. George A. Lynn, of Monongahela City, Pa., read a paper on this subject before the last meeting of the American Medical Association, wherein he stated that the object of his paper was to show the proper method of using the bichloride of mercury as a specific in the treatment of diphtheria. The mere use of a remedy does not necessarily constitute its use as a specific. For instance if one should attempt to control a malarial fever with ¼ grain doses of sulph. of quinia given two or three times a day, it would most signally fail, and he might say that he had tried the remedy and it had failed in his hands.

So in using the bichloride of mercury as a specific in diphtheria, the dose, time of giving, and stage of the disease, are as important as the remedy itself.

"Without entering into a discussion of the pathology of the disease, I may point out what seems to have escaped the notice of most writers on diphtheria, that there are two distinct stages in the disease; one the disease proper, which lasts from three to five days, and terminates in the full development of the membrane and the generation in it of a deadly poison, the other the effects of the absorption of this poison, which is generated in the membrane only, and not in the blood, but when absorbed in sufficient quantity destroys the red corpuscles of the blood. Patients do not die in the first stages of the disease (except in the croupous form) but only from the effects of the poison absorbed from the membrane.

"Taking this view of the case to use the bichloride as a specific:

"1st. It must be given in the first stages of the disease.

2d. It must be given in large doses, frequently repeated.

"The effect of the large doses of this remedy, given in the early stage of the disease, is to reduce the temperature, relieve pain in the head, back, and limbs, unlock the secretions, lessen the soreness in the throat; in time, to relieve the nausea and vomiting, restore the appetite; and, most of all, it prevents the generation of the poison in the membrane; in mild cases it checks the formation of membrane at once, and causes what is formed to speedily disappear.

"Now, as I claim that the greatest virtue of this medicine consists in its preventing the generation of the poison in the membrane, the absolute necessity of giving it early in the disease becomes evident.

"It will take physicians a long time to find out the value of this remedy, if they persist in only trying it after everything else has failed, and their patient is in a moribund condition; yet even in such cases I have known it to prove successful.

"In using a medicine of so great power, the manner of exhibiting is of some importance. It is best given in solution, so that when excessive

nausea is present, the dose may be gradually lessened and the time shortened, giving the stomach a chance to dispose of it, and at the same time keeping up full treatment. By ordering the druggist to make a solution of the bichloride in alcohol of the strength of gr. j to f. ʒ j, and dispensing from this, the weighing of a grain and fractional parts of a grain is avoided. Next in importance is a pleasant vehicle in which to give it; this we have in elix. bismuth and pepsin, or elix. of pepsin. Pepsin itself has a good influence in the disease, and is said to have the property of softening the membrane.

"In a mild case of diphtheria, I give a child 3 years old $\frac{1}{16}$ of a grain, or in a malignant case $\frac{1}{12}$ of a grain of bichloride of mercury in a teaspoonful of elix. of bismuth and pepsin every 3 hours. To an adult I give from $\frac{1}{12}$ to $\frac{1}{8}$ of a grain every 3 hours.

"The manner in which this dose is borne in a bad case of diphtheria is a matter of surprise to a physician using it for the first time. It rarely disturbs the stomach, and soon allays existing nausea. I have never seen it produce ptyalism, and it seldom acts on the bowels more than is desirable. I generally order carbonate of magnesia to be given the first night, and after that the action of the bichloride keeps the bowels open. Under this treatment, when commenced early, in an ordinary case the patient will be convalescent by the end of the third day, but in more grave cases the medicine should be continued to the end of the fifth day—it rarely needs to be given longer.

"Where the disease has made considerable advancement, and the poison of the membrane is already being absorbed, as may be the case before the physician is called, the result may not be so satisfactory, and brandy and iron should be added to the treatment.

"If we assume that this treatment is no better in results than the general method in vogue, still it has many advantages that strongly recommend it.

"There is but one medicine to be given, and there need be no confusion or mistakes. No washes or gargles are needed; no swabs or probangs to be thrust down the throat to strangle and frighten the patient, and make him wish he was dead and at peace; no steaming; no atomizing; none of these—only a teaspoonful of not unpleasant medicine and two or three hours rest. While I hold that the corrosive chloride of mercury, given in large doses in the very early stages of diphtheria, is a specific, because, when so used, it prevents the generation of the poison in the membrane, and soon arrests its formation, yet membrane is often formed before we are called to the case, or before the remedy has had time to stop the process; and in this case it may involve the windpipe, or may be primarily formed there, causing diphtheritic croup; and a new danger arises from mechanical obstruction, for which the corrosive chloride gives no relief.

"The difficulty of breathing is common to all kinds of croup. It is as great for the time being in simple croup as it is in pseudo-membranous or diphtheritic croup. For this and other reasons it is held by good authority that the dyspnœa of croup is not due in the main or even in great degree to the mechanical obstruction of membrane in the windpipe, but is rather due to the spasmodic condition of the glottis, and of nervous origin. It is for the relief of this dyspnœa that we resort to tracheotomy, at all times a dangerous operation, and in diphtheritic croup almost hopeless. In any kind of croup the operation, if successful, only enables the patient to breathe. Its effect on the disease is rather to aggravate than otherwise. If we had a remedy that would control and relieve the spasmodic condition of the glottis in croup, we would have little need for this operation. And I think we have this in the chloride of gold. A few years ago I was using the chloride of gold, as recommended by Niemeyer in his practice, in some obstinate cases of hysteria, and observed that it had marked effect in nervous affections of the air-passages, and was thus led to try it in a bad case of diphtheritic croup, with good results.

"Since then I have used the chloride of gold in all cases of croup. In simple croup it acts as a specific, and nothing else is needed, and but few doses of this.

"The chloride of gold should be given in solution in distilled water. As it is very deliquescent and difficult to weigh, I direct the druggist to dissolve the contents of a 15 grain bottle,—as it comes from the manufacturer—in 15 drachms of distilled water, and dispense from this solution.

"A caution is necessary in administering—not to use a spoon, on account of the strong affinity the preparation has for metals, especially for silver. I direct it dropped in a glass with a little water, and as it is almost tasteless there is no difficulty in taking it. The does may be from $\frac{1}{12}$ to $\frac{1}{10}$ of a grain every one to three hours."

WEAK HEART.

We take the following from the *Medical Press*, March 18, 1885:

Every physician in extensive practice is occasionally brought into contact with cases of heart failure, of which the essential nature is somewhat obscure, and which are frequently recorded, when terminating fatally, as angina pectoris. As an example of the kind of illness typical of such affections some such history as the following may be taken: An apparently healthy man of sixty or sixty five, of florid build and choleric temperament, is attacked soon after the exhibition of unusual excitement with acute pains over the cardiac region, accompanied by shooting pains down the left side and arm, and a general sense of oppression. There is no loss of consciousness, no actual paralysis, although some degree of numbness may be experienced in the hand, but without materially

diminishing the force of its grasp. Occurring in the absence of the physician, the bystanders administer stimulants, and resort to rubbing the arm of the sufferer, with resulting relief to the symptoms; and in an hour's time probably the attack so far remits as to admit of the patient's moving about more or less freely; or a fatal termination may then and there occur. It is more likely, however, that, as in the most recent cases of the kind we have encountered, an interval of rest will be noticed, and then on a renewal of movement, the symptoms will once more set in, this time, perhaps, less violently than at first, and apparently ending in the appearance of quiet repose, during which death ensues almost without any indication of its approach.

Very often the subjects of such illness are unable to recall that they have ever been similarly attacked; they have not, that is, as is usual among the victims of angina pectoris, been for a greater or less number of years suffering from spasmodic affections of the heart, and to their own knowledge this organ of their economy is free from any kind of disease. Nor as far as our own experience goes does auscultatory examination yield any positive or reliable signs, with the exception that its sounds are distant and indistinct; but the most careful observation will fail to make out anything deserving the name of diagnostic indications. Moreover, the evidences of cerebral lesions are altogether absent, and the suggestions of any such origin for the symptoms exhibited in the cases described must be entirely excluded on purely clinical grounds. Neuralgia also can hardly be accepted as explaining the phenomena, inasmuch as a sudden single attack of so violent a nature as to produce a fatal result is improbable, to say the least; and wherever this cause is responsible for death it is reasonable to assume that the final illness will have been preceded by less severe indications of cardiac neuroses. It is consequently necessary to look for some other producing caues of the effects, and this may with some assurance be assumed to reside in a deterioration of the heart itself. As already hinted, the subjects generally found to suffer in the manner under discussion are those in whom the existence of fatty heart might be reasonably suspected; and the *modus operandi* of the changes taking place under such conditions is not difficult to comprehend. As the structure of the walls degenerates the propulsive power of the heart is *pari passu* reduced, and a time ultimately arrives when its action suffices only to maintain the circulation under conditions of ordinary and unexcited life. Even now, however, the habits of the individual are unconsciously adapted to the failing strength of the organ; all unusual exercise is avoided, and without at all being aware of the fact, the patient foregoes most of his customary exertion, the only point which presents itself to its mind being that he is "growing old." This may continue for a length of time, but should it happen at any moment that either by indulging in a fit of passion, or by taking sudden and violent exercise, the heart is called upon to perform a labor beyond its diminished powers, then the strain becomes more than it can resist, and the attack described results. The popular remedy, a stimulant, usually in the form of whisky, which is at once administered, acts as a temporary aid to the exhausted organ, which, however, is left in a still more exhausted state when its effects have disappeared, and being then still under call to continue its normal action, it responds with rapidly lessening strength to the needs of the circulation, and with or without a renewal of severe symptoms it slows into death.

Such, we take it, is a general explanation of a large proportion of the deaths which have of late figured in reports as being caused by angina pectoris, and the frequency of which has caused some degree of surprise. We cannot, however, hope that treatment is likely to be materially assisted by acceptance of this view, since the structural degeneracy of the implicated organ must necessarily militate against any permanent restoration of its function; the more especially as the occurrence of an attack of illness offers a certain indication of its being inadequate to meet the calls made on its resources. Such failure in fact is proof that the organ has advanced so far in decay as to render its performance of even ordinary work uncertain, and it is suggestive that a greater part of the cases observed are seen in persons in whom on *a priori* grounds, fatty changes are indicated. Possibly, also, many other sudden deaths, the reason for which is often obscure, may have been brought about by similar means; and the subject is at least one worthy of receiving attention.

TORTICOLLIS.

Bartholow, Jour. Am. Assoc.

A great deal can also be accomplished by gymnastic training under the direction of the will, which should be used to educate the weaker muscles to antagonize the stronger; it is wonderful how much can be accomplished in this direction by the force of the will. All drugs that have a reputation for controlling muscular spasm have been tried in this affliction, and hyoscyamus and gelseminum have done some good, but they do not cure. Arsenic thrown directly into the muscle, by hypodermic injection, has done more good than anything else; its use was begun empirically, because it was known to do good in chorea, which is a disease somewhat analogous to torticollis; some very obstinate cases have been thus cured by arsenic. Cocaine, the drug of the day, has also been used with advantage, injections of one-sixth or one-fourth of a grain being made. While these injections are being made into the contracted muscles, strychnia should be similarly used in the paretic muscles. By these combinations we can generally cure the disease, if there be no lesion of the nerve, but we shall find it a very obstinate disease to handle.

A CHERRY PIT IN THE EAR OF A CHILD.

Dr. David Webster reports this case in the *Archives of Pediatrics*:

On Thursday, July 24, 1884, at 11 a. m., a girl, nine years of age, while engaged in a frolic, had a cherry-pit blown into her right ear from the mouth of an older sister, with whom she was playing. Half an hour later, she appeared at the office of the family physician, who happened to be absent. She was then taken to the office of another doctor in the same village, who tried to remove the foreign body with a hair-pin, and failed. At one o'clock the same day she was taken again to the family physician, who tried to remove the pit with a small dissecting forceps. The tenderness by that time was very great, and the child had become so intolerant of manipulation that his effort was very short. He therefore sent the child away, advising delay. Nothing more was done to the ear until Sunday, August 3, when the doctor went to the house and tried syringing for half an hour. Not succeeding, he put the child under ether, and tried again to remove the pit with forceps; but as he found he could not readily grasp it, he "gave it up," and on the following day, August 4, he brought the child to me.

Upon examination, I found the auditory canal red, swollen, and sensitive at its inner third. The swelling seemed to diminish the lumen of the canal by about one-half. The extremity of the canal was blocked up by a reddish mass, which was hard to the touch of the probe, and insensitive. From the history, I had no doubt that this was the cherry pit. The hearing power of the ear was reduced to 2-60, as measured by my watch. The child had suffered pain only during, and immediately subsequent to, attempts to remove the foreign body.

The question now arose as to what would be the best course to pursue. It was evident that it would be extremely difficult to remove a hard, unyielding body like a cherry pit through a pass age having a diameter much smaller that its own. Any effectual attempt to do so would necessarily involve very considerable amount of violence to the parts. Therefore, as the symptoms were not urgent, I thought it would be wise to delay any operative interference until the swelling of the walls of the canal had subsided. I advised that the ear be douched with warm water thrice daily by means of a fountain syringe for a week, when the child should be brought to me again, and then, if the conditions were favorable, I would attempt the removal of the foreign body. About a week later, instead of seeing the patient again, I was gratified by receiving a letter from her family physician, in which he stated that on Friday, August 8, after having douched the ear thrice daily, as advised, for three days, the cherry-pit came out while the douche was being used.

It is probable that in this case the foreign body might easily have been removed in the first place by a judicious use of the syringe. It is not improbable that every attempt at its removal by means of the forceps pushed the foreign body deeper in the canal, and injured the contiguous parts, thus helping to increase the swelling of the walls of the passage, already critical to resent the presence of a foreign body. I have not seen the patient since, but Dr. [illegible], to whose kind ness I am indebted for my complete history of the case, informs me that the hearing is still considerably impaired.

TREATMENT OF NIGHTSWEATS.

In the *Gazette* [illegible] we find two suggestions as to the relief of phthisical and other nightsweats. They are both simple enough and certainly worth a trial.

In the first prescription we are directed that the trunk be sponged morning and evening with a mixture of four parts of tincture of [illegible] to thirty parts of water. The cleaning is then applied by pouring it into the hollow in the hand and bathing the body an hour or two before the expected sweating.

In fifty cases tried [illegible] to suppress the perspiration was recorded.

The second method consists in sponging the body of the patient with a mixture of eight grams of chloral hydrate in one quart each of water and whiskey. If the sponging alone does not suffice the patient should wear a shirt that has been dipped in the solution and then dried at a moderate heat. In the non-phthisical nightsweat of children this device is said to yield excellent results.

In practice I generally find that we have at least three distinct varieties of rheumatism: 1. The sthenic. 2. The asthenic. 3. That variety caused and preceded by other diseases, as gonorrhœa, scarlet fever, etc.

I shall not deal with the pathology of rheumatism at all; but in this patient there is a tendency to inflammation of certain tissues, and to the accompanying fever. He sleeps in a damp bed, or catches cold in some way, and then comes on the attack. These are the cases where salicylic acid, salicylate of soda, and the bicarbonate of potash are beneficial. Of the two, I am inclined to think that I have seen more benefit derived from the salicylate than from the bicarbonate; but I frequently begin by giving the salicylate, and then go on with the potash. Attention to little details we all find in rheumatism, as in all other complaints, of great importance. For instance, covering the whole or the front of the chest with a layer of cotton wadding has often, I am sure, prevented an attack of pericarditis from coming on; and I found a night-shirt of very thin wool very useful, as these patients, perspiring much, are very apt to catch cold; in fact, I now recommend all my rheumatic patients to wear it regularly, and many have been very thankful for the advice.

THERAPEUTIC HINTS AND APPROVED FORMULÆ.

Dr Sam'l. S. Wallian, (*Med World*).

Dysentery.—Full hot bath, followed by thorough and continuous fomentations over the whole abdomen, and free enemata of as hot water as can be borne. Instead of clear water, milk and water may be used, or a weak solution of chlorate of potassium.

Strict abstinence from solid food must be enjoined, milk or Mellin's food forming the best diet. Sub carbonate of bismuth, or benzoate of soda in 10 grain doses, each dose to be followed by half a pint of hot flaxseed tea, hot milk and water, or simply *very hot* water, is an excellent treatment.

Dysmenorrhœa.—Apiol, monobromated camphor, permanganate of potassium, hot hip and sitz baths, massage, electricity, either galvanic, faradic, or both alternately; cemicifuga, viburnum opulus, oxygen and nitrogen monoxide combined.

Dyspepsia.— Hydra-headed and many-featured dyspepsia:—

First wash out the stomach. How shall this be done?

Use a stomach tube of softest rubber, with or without pump attached, or if squeamishness on the part of either patient or *practitioner* makes this infeasible, establish a thorough system of *hot water drinking.* Let there be imbibed (sipped slowly) twelve to sixteen ounces of very hot water (simple water is not flat when decidedly *hot*), or hot, weak lemonade or tamarind water, *an hour or more* before each meal and at bed time.

This should be punctually and persistently followed for from two to six months.

The diet may be varied and should be nutritious and as liberal in quantity as can be well managed by the system. Starvation is bad treatment; overfeeding is also bad. Massage, the current, open air life, oxygen modified. Drugs are for the most part delusive palliators. Some bitter tonics, as hydrastis, alumin, nux vomica, prunes Virginiana, etc., may be used as adjuncts, and sub carb. bismuth, hydrocyanic acid diluted, deoscorein, etc., for painful manifestations. Cascara sagrada is the best laxative. Pepsin may be used temporarily and as a palliative.

Intestinal indigestion may require pancreatine or peptonized food.

Dysuria.—Hot bath, hot fomentations over the bladder, fl. ext. urtica dioica, corn silk, cantharides (in homœopathic doses).

Eczema.—Constitutionally, the oxygen treatment persistently carried out relieves a majority of inveterate cases. Locally, alkaline washes, tar and zinc ointment, *hot* local bathing (very hot), Turkish and Russian baths, tar ointment with ʒ ss pulvis ararobæ to each ℥ j. Try also oil of cade, green soap, glycerite of tar (for itching) borax, benzoin.

Emphysema.—The oxygen treatment relieves more effectually than any other. Jaborandi, lobelia, ether, quinia, camphor, iodide of potassium may be of service in appropriate cases.

Empyemia.—Oxygen treatment *very freely, exhibited,* quinine, solutions of chlorine.

Epilepsy.—Constitutionally, the oxygen treatment has succeeded wonderfully with younger subjects, say under 18. Bromides of amnonium, sodium, and lithium, electricity (constant current), ether, amyl nitrite, open air life, nourishing diet, massage.

Epistaxis.—Hot water (douche), spinal hot water bag; elevate the arm on the affected side; very hot applications to the forehead, compression, post-nasal plugging, styptics (powdered alum acts well).

Erysipelas.—Internally, tincture of iron and quinia (traditional repute); locally, a strong solution of *sulphite of sodium* on saturated cloths covered with oiled silk, proves an efficient germicide (?). Tincture of iodine with glycerine and carbolic acid also acts well. Nourishing diet, mild cathartics.

CASCARA IN CHRONIC FUNCTIONAL CONSTIPATION.

BY RALPH D'ARY, ROMEO, MICH.

This is not intended to be a treatise on constipation in general; therefore I shall not take up space in enumerating its various causes and forms. My object is simply to communicate my experience, in the treatment of this common trouble in its most common form. As we generally meet with it in practice it is due to no one of its etiological causes, singly or separately, but to their combined action. Whether due to muscular torpor of the intestine or to suppression of the habit of regular evacuation of the bowels, or to deficient glandular secretion, etc., at the time the physician is consulted, all three of the above principal causes are generally in full operation, with sometimes one or the other slightly predominating, but not commonly to such an extent as to call for isolated treatment. The latter must therefore of necessity be directed against all of them. And since both muscular and glandular torpor are due to deficient innervation, it is plain that by increasing the latter and inducing patients to correct neglectful habits we ought to succeed in curing chronic functional constipation. And yet what disease is there that more obstinately defeats our endeavors? We prescribe for our patients a combination of drugs carefully selected for their specific physiological effects, long since fully proven by experiment and accumulated experience. Then we await results. At first the report is excellent. The disease seems completely under control of our remedies. The functions of the bowels are performed faultlessly, and our patient's health improves *pari passu.* But disappointment soon follows. The patient soon discovers that he is not being cured, and that the effect of the medicine is but transient. As soon as he omits the medicine he relapses into his former condition. Nay, worse! He finds that from

time to time he has to permanently increase the dose in order to obtain the wonted effect, until finally he is converted into an inveterate pilulophage, a miserable slave to his pill. Am I wrong in saying that this is the history of the great majority of patients that have become subjects to chronic constipation? Forensic reasoning seems to be entirely at fault, and the patient himself, without the doctor's aid, soon plunges into the wildest experimental empiricism, trying every patent medicine within his reach, and generally with no better luck. I could speak of no more cheerful success in the matter of treatment until I had some experience with cascara sagrada. At first I was much disappointed in its use, for I could see no advantage over older and better-tried drugs, and several decided disadvantages, especially the slowness of its action and the peculiar soreness of the bowels caused by it, and which is often quite persistent. It would be useless to detail my numerous experiments, and I will simply state that I became convinced that cascara, alone and uncombined, in my practice had no very decided results. Its action somehow always seemed to fall short of the desired end. Gradually I came to the conclusion that its action was truly elective of the bowels, but that it ended there, and that in order to make a complete remedy of it, it needed to be combined with other drugs that would act principally through the nerve-centres, and thus give both a central and peripheral impulse of innervation of the intestinal canal until normal function was established. The following formula was the final result of my experiments:

Ext. cascara .....gr. iv
Ext. nux vomica.....gr. ½
Ext. belladonna.....gr. ¼
Resin euonymus .....
Resin xanthoxylum.....ää gr. iii
Oleoresin capsicum.....gr. ¾
Make fifteen pellets.

These fifteen pellets were intended to represent the ordinary maximum dose if taken at once. I have now prescribed it over three years. Part of my experiments were conducted with a combination of fluid extracts of the above drugs of corresponding strength of dose. The object of subdividing the ordinary maximum dose into fifteen pellets was a twofold one: firstly, to allow the patient to find as nearly as possible the exact strength of dose needed, and, secondly, to allow of a very gradual lessening of the dose. For, I am happy to say that in the above formula I have found the cathartic or laxative that would admit of a gradual lessening instead of the usual tendency to increase the dose. And herein lies its whole value and my excuse for calling attention to it. By its use, where not contra-indicated by some form of spinal or other disease, one may look forward to a permanent cure of chronic functional constipation. We are not always privileged to retain patients under observation for the length of time necessary to complete a course of treatment, even where the latter is faithfully persisted in by an intelligent patient, and sometimes because the patient gets tired of prolonged systematic attention to his own case, and drops or hopelessly neglects the treatment. For these reasons many of my patients for whom I prescribed the above formula escaped my prolonged observation, and I am left in the dark concerning the effect of my prescription; but I can truthfully say that of those who under my observation complete their course every one was cured. Failures, no doubt, will not lack in the future, and may have been in the past; but the latter have not come to my knowledge, and I therefore regard this method of treatment as a success. I generally give the following directions to the patient: Take five pellets at night only, increasing the dose by one or more pellets every night until the action is sufficient. Then continue to take this number (whatever it may be) every night for one week, if possible. For the next week lessen your dose by one pellet, and so forth, lessening the nightly dose by one pellet for every succeeding week. If at the end of this course constipation still persists, begin again with about five pellets less than at first, going through with the same gradual decrease. A cure may confidently be looked for.

DEODORIZED IODOFORM.

Many attempts have been made to overcome an almost fatal characteristic of iodoform—its disagreeable smell—without destroying the antiseptic virtues which it possesses. Surgeon-Major Oppler, of Strassbourg, has just communicated to the *Central-blatt fur Chirurgie* the results of some experiments in this sense, which seem to have solved the problem. He takes finely-ground coffee and mixes it with the iodoform in varying proportions; 30 per cent. of the coffee almost neutralizes the odor, while 40 to 50 per cent. completely destroys it. Mixed with iodoform ointment (1-10) in the same proportion, coffee quite deodorizes it. A point of great importance is that coffee itself possesses great antiseptic power, and exerts no deleterious effects on the wounds. Thus a smaller quantity of iodoform suffices, the disagreeable odor is abolished, and the occasional evil effects are done away with. Coffee has the power not only to arrest decomposition, but also to postpone it. Professor Lucke is of opinion that coffee-iodoform may answer well enough for outward applications, but that it is unsuited for the interior of wounds, as the coffee would be a foreign body and interfere with healing. The coffee, previously roasted, of course, must be ground into a very fine powder before the iodoform is added, and the two must then be intimately mixed. Time alone can decide whether this combination will secure a much desired end; or whether, like pepper-mint oil, tonquin beans, tannin, Peruvian balsam, and other substances which have from time to time been tried, the iodoform will prove itself the stronger.—*Medical News.*

DIET FOR THE SICK.

In speaking of milk as a diet for the sick, Dr. William Roberts (before the *Brit. Med. Ass.*) says, that not infrequently the stomach is not able to digest the milk and we have curds passing from the bowels: here he recommends peptonizing the milk by means of pancreatic extracts. The bitter flavor of peptonized milk is, however, nauseous to many invalids, and you cannot peptonize milk without developing this unpleasant flavor. One of the best means of covering the taste of peptonized milk is to add coffee to it. Another device, which may sometimes be adopted with advantage, is to add the pancreatic extract to cold or iced milk. In the cold the action of the ferment is comparatively slow, and it takes some hours to produce an appreciable change of flavor. But as soon as milk thus charged with the ferment, is swallowed and passes into the warm atmosphere of the stomach, it is rapidly digested.

A new preparation consisting of the pancreatic enzymes in a highly purified state, under the form of a light, nearly white with powder, is absolutely free from taste and smell. Combating again the popular and erroneous idea of the nutritive value of beef tea, Dr. Robert says: "Beef tea and its congeners, however, take rank as restoratives and stimulants, rather than as nutrients. They contain no albuminous matter in solution, and the small quantity of gelatin contained in them cannot be of much account. There is a wide spread misapprehension among the public in regard to the nutritive value of beef tea. The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry, hard remnant of meat fibre which remains undissolved is exhausted of its nutritive properties; and this latter is often given to the cat or dog, or even, as I have known, thrown away as useless rubbish into the midden. A deplorable amount of waste arises from the prevalence of this erroneous notion in the households of many who can ill afford it. The proteid matter of meat is, as you know, quite insoluble in boiling water, or in water heated above 165° F. The ingredients that pass into solution are the saline extractives and salines of the meat, and nothing more, except some trifling amount of gelatin. The meat remnant, on the other hand, contains the real nutriment of the meat—and if this be beaten to a paste with a spoon, or pounded in a mortar, and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible form of food."

Speaking of cold made meat infusions, he says: "Infusions made from minced meat with half its weight of water, and allowed to stand for two hours, and then pressed through cloth, were found on analysis to contain over four per cent. of dry albumen. This quantity of proteid is equivalent to that contained in cow's milk. The nutritive value of such infusions is, therefore, very high. When heated to the boiling point they coagulate into a solid jelly. Made from beef or mutton, the product has an unpleasant bloody appearance; but when made from veal, the coloration is much paler. The best preparation, however, is made from the meat off the breast of a chicken."

While cooked eggs are more digestible than raw ones, yet when the stomach is weak and unable to digest solid food, beaten up eggs pass through the duodenum without being meddled with, and are slowly digested in their passage down the intestine.—*Med. and Surg. Reporter.*

GASTRO-INTESTINAL INDIGESTION.

Keating recommends the following treatment of acute gastro-intestinal indigestion in teething children:

℞ Hydrarg. chlor. mit., ...gr. i.
Pulv. ipecac., ...gr. ss.
Soda bicarb.....grs. viij.
Sacch. lact.....grs. x.
M. ft. chart. iv.

This is to be followed by a dose of castor oil, and then the child should be placed on a careful diet for a day or two, and given the wine of pepsin in half teaspoonful doses, or the elix. cinchona co. —*Archives of Pediatrics.*

THE CANADA MEDICAL RECORD

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MONTREAL MARCH, 1888.

AUSTIN FLINT, M.D., LL.D.

The profession in Canada will learn with profound sorrow of the sudden death, on March 13, of Dr. Austin Flint, senior. The sad event occurred at his residence in New York as the result of cerebral hemorrhage.

Dr. Flint had been in his accustomed health, and had attended a meeting of the Faculty of Bellevue Hospital Medical College on the previous evening. Upon returning home, he retired to bed apparently as well as usual. Toward midnight he complained of severe pain in his head. The symtoms of cerebral hemorrhage rapidly developed,

and he soon became unconscious. His son, Dr. Austin Flint, Jr., and others were at once summoned. All remedial measures, however, proved unavailing. Dr. Flint's vital powers slowly ebbed, consciousness did not return, and at 2 P.M. of that day he died.

Dr. Flint was born at Petersham, Mass., on October 12, 1812, of a lineage honorable in medicine. His great grandfather, Dr. Edward Flint, practiced at Shrewsberry, Mass.; his grandfather, after whom he was named, was a private and afterward a surgeon in the Revolutionary Army, and his father, Dr. Joseph H. Flint, was a distinguished surgeon, residing at Northampton, Mass.

Dr. Austin Flint began his medical studies at Harvard, and received his degree from that school in 1833. After practising for three years at Boston and at Northampton he settled in Buffalo, and by his numerous and valuable contributions to medical literature he rapidly rose into professional prominence. In 1844 he was appointed to the Chai of the Institutes and Practice of Medicine in Rush Medical College, Chicago; but he held the position for only one year. In 1846 he founded the *Buffalo Medical Journal*, and during ten years he was editor. In 1847, in conjunction with Profs. James P. White and Frank H. Hamilton, then of Buffalo, he founded the Buffalo Medical College, and he filled the Chair of Medicine in its Faculty until 1852, when he accepted the Chair of Theory and Practice in the University of Louisville. In 1856 he returned to Buffalo and again became connected with the Buffalo School. The winters of 1858 to 1861 were passed in New Orleans, Dr. Flint having accepted the Chair of Clinical Medicine in the New Orleans school of Medicine.

In 1859 Dr. Flint removed his residence from Buffalo to New York City, and shortly afterward he was appointed to the chair of Pathology and Practical Medicine in the Long Island College Hospital, and this position he held until 1868. In 1861 he was appointed to the Chair of Medicine upon the organization of the Bellevue School, as well as Visiting Physician to Bellevue Hospital. In 1872 he was elected President of the New York Academy of Medicine, and in 1883–84 President of the American Medical Association.

Dr. Flint's contributions to medical literature were numerous and valuable.

The work, however, which added most to his reputation as a medical author was his "Treatise on the Principles and Practice of Medicine," which appeared in 1866, and which has passed through five editions. It at once took high position, and became a favorite text-book in all the medical schools of the United States and Canada. In addition, Dr. Flint has also written a work on "Clinical Medicine," a volume on "Phthisis," essays on Conservative Medicine and Kindred Topics," and a "Manual of Auscultation and Percussion." He contributed the articles on "Pulmonary Phthisis," and on "Neuroses of the Heart" to the "System of Practical Medicine by American Authors." In addition, he has been a voluminous contributor to periodical literature.

LOCAL AND GENERAL.

The Philadelphia *Medical News* publishes a very interesting paper on a case of retro-peritoneal spindle celled sarcoma, by Dr. Wm. Osler. The patient had polyuria, passing seven pints of urine, sp. gr. 1.004 with a trace of albumen, during the 24 hours for several weeks. This symptom was, Dr. Osler thinks, caused by pressure of the large tumor upon the renal or solar plexus. The irritation was only temporary, as the amount of secreted urine fell to normal some time before the patient died. No dissection of the nerves could be made—a matter of regret as we know very little about the causation of diabetes insipidus, and this case seemed to be one that might have thrown light upon an obscure subject had the condition of the sympathetic in the region of the tumor been discovered.

The same number of "*The News*" contains a short article by Dr. W. A. Edwards on Supernumerary Mammary Glands and Nipples. I remember that a case reported by Dr. Campbell at a meeting of our local Medico-Chirurgical Society brought on a discussion of this interesting subject. Dr. Edwards tells us that only some 105 cases of polymastia are reported in literature, but Leichenstern and Mitchell Bruce think they are comparatively common, the latter authority setting down their frequency (as shown by the examination of 3956 persons) as great as 1.54 per cent. All observers agree that they are most frequent on the thorax, usually on the left side, and in the great majority of these instances below the normal mammæ.

They have been described in other situations such as in the axillæ, below the costal cartilages, over the scapulæ, etc.

The morphological question as to whether these are examples of the law of "reversion to original types," or whether they are truly accessory mammæ or enlarged sebaceous glands may be answered by showing that they do not imitiate in their situation and structure those of any particular mammal, as they would do if they were genuine reversions; that the lower mammalia have similar adventitious glands; and, finally, mammæ with true milk-bearing glands are also found in the human male in unusual situations.

I am very pleased to see that the proposed *crèche* will likely be successful. How to assist and yet not pauperize the poor, and especially the poor mothers of a large city in their struggle for existence and in their efforts to bring up a large family of children, is a problem worthy of the consideration of every medical man.

He knows best of all how many women of the lower classes are kept in ill-health by the worries and the cares incidental to the management of a household upon a small and precarious income. To relieve her for a certain number of hours of the day of this constant care will confer a boon upon many an overworked woman who might otherwise be obliged to seek needed rest in hospital.

We badly need another aid to the deserving poor, and that is some system of nursing them at their homes while laid up from illness. It has been suggested that women of their own sphere of life should be trained not only to do the required nursing but to assist in the house work while the mother is prevented from attending to it.

The fees receivable by nurses of this class might be paid partly by public subscription and partly by the patients themselves. There is urgent need of some such system in this city. The annual cost would be small and great good might be accomplished thereby. If some charitable association would take the matter in hand I am sure it would receive the hearty support and co-operation of the profession.

I suppose we shall have the usual rate of infantile mortality during the next summer. The cries of the innocent go up for a summer sanitarium, but no one appears to heed them.

With St. Helen's and Nun's Islands close at hand, and suitable sites thereon for a temporary hospital resort, it is a pity that nothing can be done to fight the grim array of deaths from diarrhœa, cholera infantum, dyspepsia, infantile debility and all the other evils that largely result from life in close, hot and ill-ventilated houses. The fresh, cool air of the St. Lawrence would work wonders for many a child struggling with disease, and it is a wonder that in this city of charities and high death-rate among children nobody has taken up the work.

"Comments on Pasteur's Method of Treating Hydrophobia" by Dr. Chas. W. Dulles of Philadelphia, a reprint from the MEDICAL RECORD, has come to hand and deserves the attention of every unbiased searcher after truth. Pasteur was a great scientist long before the world heard of him in connection with the treatment of rabies, and it seems to me a pity that his claim upon our gratitude and our respect, should not have rested alone upon the work which in the past he did so well for France and for all mankind.

This hydrophobia rage, as in my humble way I pointed out some time ago, is a transitory thing which when it subsides will detract greatly from the fame of the man who first gave it birth. Even if Pasteur has discovered a cure for hydrophobia it is of exceedingly little importance to us in Canada. Of the millions of dog bites that have occurred in this small Dominion of ours how many in the past ten years have resulted in human rabies?

As far as I know, not one, and I question whether any living Canadian doctor has ever seen here a genuine case of hydrophobia.

With Dr. Dulles' conclusions as to the results of Pasteur's method I entirely agree: "One death under his hands, with a lame explanation; over a hundred persons to testify that his inoculations probably do no immediate harm; an almost equal number to illustrate the well-known advantage of having one's fears allayed—in all, no more than is credited to a host of nostrums. Besides which, the excitement it has aroused has brought about a senseless alarm in regard to dogs, and the killing of innumerable innocent and unfortunate animals to bear witness to the sharpening of men's fears and the dulling of their judgments."

P. A. LAVER, M.D.

MONTREAL, March 20th, 1886.

THE CANADA MEDICAL RECORD.

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VALEDICTORY ADDRESS TO GRADUATES.

Delivered at the Medical Convocation of Bishop's College, April 13, 1886.

By the Rev. Prof. SAUNDERS, M.D.

MR. CHANCELLOR, LADIES AND GENTLEMEN :—

On behalf of the Medical Faculty of Bishop's College I thank you for the kind interest in our work which you manifest by your presence here to-day.

It is cheering to us after the toils and often self-denying efforts of another session, to meet you under circumstances so pleasant.

It serves to stimulate us to increased zeal, and must also be inspiring to the students to see and feel that there are those outside who are not indifferent to their trials and triumphs, but who come here to crown the successful competitors with the laurels of their approval and applause.

And you, the members of the Graduating Class, I most heartily congratulate on the successes which have crowned the struggles of years and the golden portal to which you have now arrived, and which now stands open before you, inviting the trained athlete to still greater struggles and still greater honors. I am not at all sure that the Faculty has acted wisely in placing this duty on my shoulders to day. It is almost impossible for me to realize that I am speaking for them. Some of you have been my fellow-students. With you I have joined in the boisterousness of student life. With you I have stood amazed at the profound learning and wisdom of these "most potent, grave and reverend signors." With you I have stood in blank despair as we have crept along the shores of the vast sea of Medical Science, and wondered how it could be possible to sound its depths and reach out to its mighty headlands.

However, you have been learning something about nature's wondrous laws of compensation, and perhaps they come into play just here, and after all even this fact may not be without its advantages; and while those whitening heads and study-furrowed brows stand before you as giants whose medical power and skill strike you with awe, I stand as a kind of connecting link between you and them, and having so lately emerged from the chrysalis state, and so lately donned professional wings I may perhaps be able to enter more fully into sympathy with you in your present feelings and aspirations. In my anxiety to discover some personal fitness in myself for the work now allotted to me I have thought that perhaps in my semi-professional position I may be able to offer some suggestions from that standpoint that may be of service to you. We are so apt, while engrossed with our particular duties to become narrow, and scarcely to heed what is going on outside of our own lines, and therefore, occupying as I do a position somewhat outside, I may be able to give you a hint or two as to what outsiders think and say about medical men.

And as I am in the habit of dealing with the most serious concerns of men I trust you will to-day pardon what may appear to you to be the undue seriousness of the remarks which I may make. I hardly need to tell you that if the accumulation of *wealth* is the goal which you have set before you

in life you have taken the wrong turn in the road. I believe the profession is fairly well paid perhaps; but few medical men amass wealth to-day, a bare living is about all that comes to the lot of most, with perhaps a little to lay up for a rainy day. But grander rewards than gold lie before you, sublimer honors await you if you love your profession and are determined to excel. In no profession perhaps is it more true that there is plenty of room at the top, aye, and plenty of fadeless crowns to be had for the winning. Your calling is among the loftiest that a man can follow. In its ranks have stood some of the grandest men in earth's honor-roll, even the perfect Man himself. The mighty Teacher of men did not despise the office of physician, but went about healing those who were diseased. Keep ever before you the loftiness of your work; do not descend to quackery or charlatanism.

We shall follow you with a jealous eye. Your successes will be ours, your triumphs will make us glad, while your failures and dishonors, if unhappily they should come, will smite us through with sadness. You belong to a college which is youthful and vigorous, but which perhaps can hardly be called strong as yet, or at least only strong in the unquenchable zeal of its Faculty and Alumni; in its determination to excel in the quality of the work which it does, and in the profound conviction that it has a work to do in this land, and that whatever may betide, and at whatever cost, it will continue to make room for itself and advance to the utmost of its power the cause of medical training throughout this broad Dominion. We therefore look to you—by the eminence which you may obtain in your profession—by the successes which you may achieve—by the laurels which you may win—and by the interest which you may show in the welfare of your Alma Mater to help us in our toil of duty and love.

Let me urge you, first, all to be men—men of thought, men of science—don't drift.

The stream of human life is being blocked up with drift-wood. It is so easy to drift.

One of the first temptations that will meet you as you go out into your profession will be to drift into a mere rule-of-thumb practice—A mere routine manner of prescribing certain stereotyped blunderbuss formulæ, which are fired off simply because they happened to have appeared to do some one good some day, or because there are so many ingredients in it that it will be almost sure to hit something.

Make every case a special study—be specialists in that sense—these are the specialists the profession most needs. Remember that it is the duty of every physician to patiently, persistently and scientifically investigate every disease he is called upon to treat. In no other way can you become competent practitioners. It is your duty to yourself—it is your duty to your patient—it is your duty to your profession; and investigate in more than one direction. The fear comes to me sometimes that we are drifting too much into the mere investigation of the etiology of disease. I admit that the bold investigations in this line have been very instructive and interesting. And we are all now ready to acknowledge that diphtheria, scarlatina, tuberculosis and other diseases are germ diseases and Koch's common bacillus seems to present very strong claims to be recognized as an important factor in the production of cholera.

The uniformity with which certain parasites are found in connection with certain pathological conditions clearly establishes the fact that these minute creatures are either the product of these diseases or the exciting causes of them. Thus much valuable light has been thrown into dark places. But I believe that larger therapeutical knowledge is needed. We need more facts and less theories. We need more exact observations of a clinical and therapeutical character. It has been truly said that the place to study disease intelligently is at the beside.

Do not be dazzled by the brilliancy of those wonderful investigations of Koch and Pasteur and run off in these lines, but keep up your interest in clinical observation. There are other fields lying untraversed before you, and not least among them are Pathological Histology and Chemical Therapeutics—if you will permit the phrase.

We want to know not only what causes the disease but what can prevent and destroy it; and not only what can destroy it, but how it does it, what is its modus operandi, and what is its action on the various tissues.

Again, I would say do not drift into disregard of human life. Human life is the most sacred earthly treasure. Don't take it upon yourself to decide in any case that death is better than life,—that a certain life is valueless. We cannot know of what value a life may be. We cannot know what may hang even upon a few hours of life. It is our business to heal and relieve disease and prolong human life to the very utmost.

Scientific knowledge is of immense value, but we buy it too dearly when we buy it at the expense of

a brother's life, even at the expense of a few fleeting hours of a painful existence. His life is not ours, it does not belong to us, and we have no right to sacrifice it, even though we may flatter ourselves that it is for the good of the many.

May I say, too, do not drift into harshness and want of feeling for the poor patient. Many an eminent physician has owed his success in life to the lessons he has learned in the lonely garret of his poorest patient.

Look above the paltry fee, and remember that you are dealing with a brother, and a kindly word and a kindly deed will leave sunshine behind you that will help marvelously to effect the cure which your prescriptions aim at.

And, if you will bear with me, I will go a step further and say, do not drift into materialism. It is very popular now, especially perhaps among Medical men. Your studies, which for years you have been prosecuting, have necessitated the investigation of matter and its properties, and one is liable in this pursuit to fall into the error of thinking that matter is all that there is in man. And this, too, in the face of the fact that every practitioner admits that in numerous instances he recognizes the necessity for the treatment of mind (whatever he means by it) more than the treatment of the body. Schiller said "I abandoned surgery for philosophy and poetry, because I found the wounds of the spirit were so much more grave and numerous than those of the flesh."

You will soon stand in sick rooms where you will seem to stand to the sick man and his friend next to the eternal God, and your opinion will come with a weight second to none on many matters. It is a grave and responsible position to occupy, and I intreat you not to let full crude conjectures on the ears of the dying.

There is such a thing as Theological and Psychical quackery as well as quackery in other lines. Remember that the phenomenon of cerebration is one of the most subtile and profound that we have to deal with. Localized cerebration has been advanced by materialists as an unanswerable argument in favor of their theories. The seat of intelligence, being in the convolutions of the cerebrum and memory has been located in the Fissure of Sylvius near the Island of Reil.

But as it is yet a disputed point whether the bacteria of tuberculosis is the cause or the effect of the disease, so it is certainly not yet proven that the Fissure of Sylvius is not merely that portion of the brain where the mind receives, communicates and expresses the sensations of subjects and objects. If memory is merely the substance of the brain, how comes it that in old age when, since youth the grey and white matter have frequently been renewed, we retain most vividly the memory of childhood's years. Can the substance of the brain store up a life-time's experience and produce it at will?

If so, at the *will of what*. Surely the will of something superior to itself or it could not control it. Surely a force above it if it is needed to throw this mind cell shuttle back and forth to the Fissure of Sylvius in its proper time and place. I take it that it certainly is not yet proven that the brain is not like the hand—a mere instrument to do the will of the superior intelligence which acts upon it and through it. Don't let us be afraid of truth in whatever way it comes, and whatever hoary or modern notions it may overthrow,—but let us be sure it is truth; let us be sure it is not mere prejudice and imagination.

If I show a man my watch (to use that old illustration of Paley's) and he should say, "who made it?" and I answered, "no one—it made itself," he would reply, even if he were the most pronounced materialist: "Why, that is folly or madness." So if I point to Orion with his eighty-one stars, and show that they move with a regularity and precision that puts the finest watch to shame; if I point to the human body with its marvelous mechanism, to the human brain with its lofty and transcendent powers (the greatest of all creative achievements) and ask who made them, and he answers "they had no maker—they made themselves,"—though the popular voice to-day may applaud and say: "Behold an advanced scientist and mighty thinker,"—have I not just as good ground as he had before to say, why, that is folly or madness. Ignorance certainly has its dangers, and so I believe every study has its peculiar dangers, and this is one that will meet you every day. I therefore plead with you to be on your guard, and not drift into the utterance of unproven and ill-founded materialistic phrases. You may say perhaps: "these are trifles of which you speak." It is related of Michael Angelo that in explaining to a visitor at his studio what he had been doing at a statue since his previous visit he said: I have retouched this part—polished that—softened this feature—brought out this muscle—given expression to this lip—and thrown more energy into that limb." "But these are trifles," said the visitor.

"It may be so," replied the great artist, "but trifles make perfection, and perfection is not a trifle."

So we trust that these trifles will not be unheeded, and that you will all climb to the highest seats among men and among physicians, and that truth and fame will entwine their garlands around your brows, and prosperity and success scatter their roses in your path.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 5th, 1886.

Unusual Ovarian Tumor.—Dr. Wm. Gardner exhibited an ovarian tumor, and briefly narrated the case. The woman, aged 48, long married, sterile, consulted him six years previous for a moderately large cystic tumor, with solid nodules in the pelvis. Menstruation was increased. She was advised against operation, but saw another surgeon, who explored through abdominal incision, but apparently did not otherwise interfere, as she appeared some time afterwards unchanged in her condition, except for the scar, with a ventral hernia. Dr. Gardner then lost sight of her till two months ago, when she was admitted to the Montreal General Hospital and he was asked to take charge of her. She then related that a few months after the exploration she began to enlarge rapidly, and pressure symptoms became so distressing as to induce another surgeon to tap. This was necessary many times, but four months previous to admission the tumor ceased to enlarge. The lower part of the abdominal walls and lower limbs were œdematous. The whole abdomen, except the upper part, was elastic, indistinctly fluctuating, and dull on percussion. The hypochondriac and epigastric regions were tympanitic, but gave distinct wave-fluctuation. Menstruation had ceased eight months previous. Patient was eager for operation, although made fully to realize its serious character, and it was decided to give her the chance, though small. There was universal very firm adhesions to parietes, intestines, bladder and everything in the pelvis. The bladder was adherent and drawn up at least six inches over the tumor. It was separated without difficulty. Intestine was wounded twice during the operation, but promptly sutured. Above the tumor was an encysted collection of peritoneal fluid, with the intestine floating on it. Under this lay a large, very thin, translucent cyst attached to the tumor. Hemorrhage, although not excessive, was free enough, when aided by the long severe operation, to so exhaust that it soon became apparent that the patient's chances were almost nil. The base of the tumor contained uterus and a large mass of calcareous matter and myomatous nodules. It was included in a Tait's wire clamp, constricted, and then amputated. Bleeding being nearly arrested, the abdomen was closed, with a drainage-tube inserted. The woman died half an hour after being put to bed. The tumor was a multilocular cystoma, the large cysts containing large masses of papilloma, nodules of which were also found on the parietes of the abdomen. The mass of calcareous matter measured $3\frac{1}{2} \times 2 \times 1$ inches.

Small fragments of transparent rock-crystal removed from the Cornea.—Dr. Buller exhibited the crystals and related the case. They consisted of three small fragments of rock-crystal. The largest of the three is of a triangular or conical shape, about $1\frac{1}{4}$ millimetres in length; the others are of smaller size. He removed them from the cornea of a marble worker, where they had been lodged for several days. They had been projected into the eye from the chisel of another workman as the young man who received the injury was passing by. He came to him about an hour later, and he found two small incised wounds of the cornea lying parallel to each other, about one millimetre apart, and nearly opposite the lower margin of the pupil. After a careful scrutiny with focal illumination, he failed to find any foreign body, but prescribed a solution of atropine and cold water compresses. The patient returned for inspection from day to day, but despite the treatment the eye became more and more inflamed. The other one he had lost by a penetrating wound of the eyeball some months previously, so that he was led to explore the little wounds with a fine cataract needle. By this means the steel point coming in contact with the gritty particles instantly gave unmistakeable evidence of their presence, though wholly invisible to ocular inspection. On moving one of the particles some aqueous humor escaped, showing conclusively that it had penetrated partly into the anterior chamber, and, from being invisible, would be extremely liable to be pushed into the anterior chamber during any attempt at extraction. The eye was then put under the influence of cocaine, and the blade of a broad needle was passed through the cornea (of course penetrating the anterior chamber) in such a way

that the part containing the foreign bodies rested upon the flat surface of the transferring blade. It was an easy matter then to remove the particles with a fine cutting needle, and without the slightest chance of their being pushed into the anterior chamber, a mishap which would have led to disastrous consequences if it had been permitted to occur. The eye, once freed from the source of irritation, made a rapid and satisfactory recovery.

Dr. Johnson exhibited the following specimens:—

Sacculated Kidney from Renal Calculus, removed from a patient who died of heart disease, with thrombosis of right middle cerebral artery. Symptoms of blood and pus in urine observed before death. Right kidney enlarged to double usual size, distended by fluid, renal tissue destroyed, and organ converted into series of cysts containing fœtid ammoniacal fluid, tissue debris and uric acid granules. At inferior, extremely small parts of renal substance remaining; in calices, several small uric acid calculi. This portion of kidney alone communicated with ureter.

Fatty Degeneration of Heart—Aneurism of left ventricle perforating into Pericardium—Aneurism of Abdominal Aorta.—Patient was 75 years old. At autopsy, pericardium contained eight ounces of fluid. A small amount of firm clot adherent to anterior surface of heart on dissection. Valves healthy; substance showed extensive fatty degeneration. In left ventricle, a pouched sac size of walnut found in wall of septum, bulging towards left ventricle. This communicated directly through a small opening 2 mm. in diameter, with lacerated external opening of large size in septum, the orifice situated to right side of anterior coronary artery. Sinus about orifice infiltrated with extravasated blood; and in same patient, extensive atheroma of aorta, and in abdominal aorta, just above bifurcation, a fusiform sacculated aneurism rising from right side of vessel; extensive fatty change of intima at this point, with formation of cholesterine. The sac contains a soft dark-clot, non-adherent.

Dr. Geo. Ross said this patient had been suffering from cellulitis of the arm, and alarming symptoms coming on, he was asked to see her. She had become suddenly pallid. On examination, he found her almost pulseless and extremely feeble. A systolic murmur was to be heard over the lower sternal region, also over the tricuspid area. The murmur could be heard over the apex, but not at the base. The House Physician said she had had no murmurs before. Dr. Ross said that it was remarkable the time she lived after the grave symptoms set in—from 2 a.m. till 9 p.m. It was no doubt due to the small amount being poured into the pericardium. He believed the bruit to be caused by the current in the aneurismal sac containing clot.

Dr. Wilkins said it might be due to the blood poured out with each systole through the rent.

Dr. Rowell exhibited the *Lumbar Vertebræ* of a patient, the immediate cause of whose death was *Miliary Tuberculosis.*—The following is the history of the case: Mrs. A., aged 46, married, admitted to the Western Hospital under the care of Dr. Armstrong, complaining of intense pelvic and lumbar pain. The patient was comparatively easy if quiet, but the pain was much exaggerated on walking. On examination, found fixation of the lumbar vertebræ, which would remain curved strongly forwards (lardosis) in any position in which she was placed. A plaster-of-paris jacket was applied, which gave her perfect relief for some weeks, when she began to complain of chilly sensations, accompanied by a high temperature, going up to 104° and 105°, without, however, any distinct rigors or profuse sweating. Moist sounds were heard over both lungs, back and front. She now became hectic, suffering from anorexia, with rapid emaciation, and finally died about three months after admission into hospital. At the post mortem, found both lungs completely filled with miliary tubercles throughout their entire extent. The spleen and kidneys also contained a large number of miliary tubercles, especially the spleen, which was completely studded with them. The heart and liver were fatty. The 2nd, 3rd and 4th lumbar vertebræ were removed, and found softened by an inflammatory process in their cancellous tissue, where there were small pus cavities. The cancellous tissue of the 3rd lumbar vertebra was broken down to a considerable extent, and there was pus found between the dura mater of the cord and the bone in the spinal canal of that vertebra. It was noted that the intervertebral substances were healthy, the disease being confined to the cancellous tissue of the bodies of the vertebræ.

Drs. Perrigo and Trenholme, under whose care this patient had been at different times, also made some remarks.

Dr. ROWELL also showed—

Ovarian Tumors from a case of Double Ovariotomy—Mrs. G., aged 27; family history negative; married three years ago, never pregnant. For the last two and a half years has suffered a great deal from abdominal pain, not particularly exaggerated at the menstrual periods, which occurred regularly once in 24 days. She was not herself aware that she had any localized enlargements. The operation was performed in the month of February last by Dr. Armstrong, in the Western Hospital. The cyst on the right side was found to be unilocular, about the size of a fœtal head, and containing serum. Its walls were strongly adherent to the brim of the true pelvis by their under and posterior surfaces, which made its removal very difficult, and it was followed by a considerable oozing of blood which, however, was controlled by hot sponges. The cyst on the left side was about the same size, also unilocular, and contained serum. It was slightly adherent to the omentum, but was removed with much less difficulty than its fellow. The patient recovered without a bad symptom.

Progress of Science.

CLINICAL LECTURE.

By Dr. ROBERTS BARTHOLOW, of Philadelphia.

INDIGESTION.

I bring before you, gentlemen, a case that affords some very interesting points, and that gives me the opportunity of urging upon you the importance of attention to dietetics in the treatment of disease. In the first edition of my text book on materia medica, I devoted considerable space to the discussion of this subject, and my subsequent experience has convinced me that its importance was not over-estimated. I believe that we can do a great deal, not only in dyspeptic disorders, but in various chronic diseases, by noting and using this important weapon. In is a well-known fact that by a rigid adherence to a dry diet we can accomplish oftentimes wonderful results in cases of chronic exudations, especially of a fluid character.

Now, this woman before you, had been for some time accustomed to use largely a starchy diet, she consumed very little meat; in time digestive disorders were developed, she was unable to properly digest this excess of starch, and acid dyspepsia was the result. She, in consequence, suffered from anæmia, all mucous membranes were pallid and her nutrition was much impaired. In this form of indigestion there is a fermentative process established as the result of which we have the formation of acetic acid and carbonic acid gas. The indigestable article may be fat, when we will have the liberation of fat acids, when, in the eructations, we will have the characteristic disagreeable odor and taste of butyric acid. If the eructations are simply of carbonic acid gas, they will be inodorous, hence we have an easy means of diagnosis between saccharine and fatty indigestion. Now, in such cases, all remedies will be absolutely useless without a rigid regulation of the diet; we must make a careful study of the diet from the point of view of the various disorders. In this case, as soon as the diet was modified so as to exclude the offending articles, the patient commenced to improve, but as sure as she forgot her caution and used that food, which she preferred, her bad condition became aggravated. In addition to regulating the diet, I ordered a mixture of carbolic acid, creasote and bismuth, suspended by glycerine. The glycerine here serves a double purpose, first by arresting the fermentation (for it is, in itself, a good remedy for flatulency), and, secondly, it serves to hold the other drugs in suspension. This is an excellent combination for stomachal and intestinal fermentation.

CHOREA.

This boy, as you see, has choreic movements of all the voluntary muscles of the body; the heart is not involved in the choreic movements, nor is there any disease of that organ. This is an important point to note, since there has recently been much discussion in reference to the cardiac origin of chorea. Jackson, of London, advances the theory that chorea is due to minute emboli in the corpus striatum, but I think the majority of cases are against his view. This boy belongs to a neurotic family, and while he has never had rheumatism himself his family presents a well marked history of this disease. Now, I do not think that the importance of a neurotic temperament can be over-estimated as an etiological factor. I will not dilate further on the symptoms of the case, as they are apparent to you, but will proceed to the treatment. The experience of Guy's Hospital, London, seems to indicate that rest, seclusion and nutritious diet are the sheet-anchors in treatment, in nearly all cases these measures did good and in some cases they arrested the disease. Such children should be removed from school, where they are annoyed by the attention which their disease attracts from their companions. All sources of excitement must be avoided, and while giving them plenty of exercise, they must be screened as much as possible from the public observation. As for drugs, if they are anæmic, the ferruginous preparations are called for; this boy is not anæmic, and I think iron would do him very little good. Since Harley, of London, has recommended succus conii so highly, Squibb, of Brooklyn, has kept on hand a large supply, and this drug seems to do good in many cases. Gelsemium is also good, but I think no single drug has so much in its favor as arsenic. In this case we will give Fowler's solution, three minims thrice daily, in combination with the fluid extract of gelsemium.

Here we have another case of chorea in a little girl, who has been so afflicted for three or four years; she also comes from a family where the neu-

rotic temperament is strongly marked. At times she gets much better, almost well, then the disease recurs with all its former vigor. There is more anæmia here than in the latter case and the appetite is capricious. We will carefully regulate the diet and give the girl tincture of calumba, one drachm thrice daily, and Fowler's solution three minims thrice daily, this she will take before meals and after each meal she will take one of the officinal pilulæ ferri iodidi.

LABARYNTHINE VERTIGO.

This is a curious case of vertigo that came on suddenly some days ago, associated with impairment of hearing. Let us remember that the semicircular canals have something to do with our position, they play an important part in the preservation of the position of the head in space. In Meniere's disease, we have hemorrhage or a sudden effusion into these canals, and the patient may even fall unconscious. When consciousness returns there may exist an inability to perform voluntary movements. From this grave form there may be all grades of severity down to the simple form that we have before us. When we have presented to us a case of vertigo, with impairment of hearing, that continues, we must always look to the condition of the auditory canal, and we will do well to enlist the services of an aurist. Charcot first called our attention to the great benefits to be derived from the use of quinine in these cases, and before that time we were able to do but little to relieve them. Now we have several remedies, all of which have somewhat the same action as quinine. We thus can use quinine, salicylic acid or salicin. All of these drugs, when used in large doses, produce more or less buzzing and vertigo. This fact was well illustrated sometime ago, in the case of a clergyman, who was undergoing trial on a charge of drunkenness; his defence was that he had just taken a large dose of quinine before the occurrence of the actions for which he was being tried. I was called as an expert witness, and was asked whether quinine could produce such phenomena as he presented, which were closely allied to those produced by alcohol. I answered in the affirmative and it was chiefly on my evidence that he was acquitted. He had taken a large dose of quinine, but he had also taken a large dose of whiskey, for his physician had ordered him quinine and whiskey, which, to avoid publicity was put into a black bottle, labelled *poison*. In these cases quinine seems to antagonize the local morbid process, especially if it be of the nature of effusion and congestion of the mucous membrane. Quinine causes this buzzing because it occasions a condition of anæmia of the parts, it lessens congestion and so favors absorption. We will order it here, but it must be given in large doses, not less than five grains thrice daily, and, if the patient will bear it, more good will be derived from ten grain doses continued for three days, then five grain doses for the balance of a week, when its use should be suspended, to be resumed if necessary. I would repeat to impress upon you the importance of carefully inspecting the ear. Remember that this is not truly Meniere's disease, though the name is sometimes applied to it. These cases are much milder, and the term should be strictly confined to those cases where there is hemorrhage, unconsciousness and extreme vertigo.

BRIGHT'S DISEASE.

I have frequently called your attention to the pre-albuminuric stage in chronic kidney disease, which I deem to be a matter of great importance. In such a state the patient will pass large quantities of pale, limpid, watery urine, of low specific gravity: she will be compelled to rise at night to urinate, will complain of rather persistent headache, thirst, dyspeptic troubles and tumultuous and irregular action of the heart. In fact, all the usual signs of fibroid kidney will be present, yet, upon examination you will fail to find the slightest trace of albumen. The vast majority of cases will present albumen, yet you will occasionally meet cases without it, and it is of importance that you should remember this fact, else you may be misled in your diagnosis. This woman, before us, has had fibroid disease of the kidneys for three or four years, yet even now there is not more than five per cent. of albumen in the urine. She has had some œdema, but never much; the arteries are hard and rigid, and we can detect evidence of high tension in the vessels. We have reason to believe that changes in the vascular system precede the albuminuria. Her heart acts rapidly and this rapidity is increased by slight exertion: she gets out of breath, but has not true renal asthma. She suffers with headache and dizziness, which I believe to be due not to true œdema of the brain, but rather to a greater or lesser increase of fluid in the peri-vascular lymph spaces, which may occur without œdema of the brain. She has also digestive disorders.

Now, I have a very strong conviction that two classes of remedies are indicated in this case. The first to relax, vascular tension, which can be best accomplished by the use of nitro-glycerine, not, as is usual, in pill form, but in solution. To secure the beneficial effects of this drug it must be carried to the point of its physiological manifestations. We will here order the centesimal solution that is one drop of nitro-glycerine to one hundred drops of alcohol, and of this solution we will commence with one minim thrice daily and add one minim to each dose until it produces headache, frontal or general, coming on about fifteen minutes after the dose and lasting for a few minutes. The physiological effects are evidenced by this headache, flushing of the face and increased action of the heart, and until such effects are noted the drug is doing no good. The dose required will vary much in different cases. Three minims will suffice in many, in a few five will be required, and I have now a young lady under my care who is taking

eighteen minims at a dose. There is a very great variation in the susceptibility of different individuals to the drug. The second indication is to check the overgrowth of fibroid tissue, and this I believe can be accomplished by the use of chloride of gold and sodium. For many years I have recommended this drug, and my faith in its efficacy is stronger now than ever. I am quite sure that I have seen cases cured by its use. The dose to commence with is 1-20 of a grain, increased to 1-10. I prefer to give it in pill form, though it may be prescribed in solution, if preferable to the patient. In chronic fibroid kidney, the question of diet is of paramount importance: large solid meals are injurious. The diet should consist of milk, animal broths, but few vegetables, and those of a succulent nature, and some fruit. The patient should dress warmly, avoiding, especially, exposure of the feet and ankles, avoiding vicissitudes of temperature, preferring a uniformly high to a low one. Remember that in many cases there is a syphilitic history, I believe in at least ten per cent, and in such cases with the remedies already indicated, I would combine the corrosive chloride of mercury in doses of one-fortieth of a grain.

PECULIAR CASE OF LEAD POISONING.

When I looked at this man's swollen hand, outside, a few minutes ago, I was struck with the resemblance it presented to a case of plumbic rheumatism. For several weeks his hands have been swollen as you see them, commencing in the right and extending to the left. The joints very much resemble the condition seen in lead-poisoning, but when we inquire about his trade, we learn that he is a shoemaker; now how could a shoemaker become poisoned by lead? When we inquire critically about the tools of his trade, we learn that the tacks which he uses are coated with lead, and that he is in the habit of keeping them in his mouth. When I look at the gums, I cannot say that I see a positive blue line, but they possess a bluish grey tint. These two facts and the absence of signs of any other diseased condition, incline me to the view that he is suffering from plumbism. In these doubtful cases, the correctness of the diagnosis can be determined by the results of treatment. The iodide and the bromide of sodium both form soluble combinations with lead, while the bromide will also afford some relief to the uneasiness occasioned by the swelling. He will also take sulphuric acid lemonade, and the contents of his bowels will be kept soluble by sulphate of magnesia. The joints will be kept at rest, and if he can afford it, he will take sulphur baths.

If our diagnosis be correct, he will feel worse for a day or two, when he will commence to improve. In these doubtful cases we can often settle the question by urinary analysis, when, if it be lead-poisoning, we will find the salts of lead.

COUGH.

The following article, by J. Milner Fothergill, M.D., Edin., appears in *The New York Medical Record*.

In this day of careful physical examination of the thorax some other matters have almost dropped out of sight. The old physician who recently declined the loan of a stethoscope by a young clinical assistant for the diagnosis of pneumonia, saying, "Thank you, young man; but I thing I can detect pneumonia without a stethoscope! could no doubt have taught that youth much that would be useful to him. A stethoscope is a capital instrument in the hands of a man who knows its use; but it has undoubtedly drawn attention away from what may be termed rational consideration of the chest, and a judicial handling of what the patient has to tell, which often furnishes a clew to the treatment; a matter on which sometimes the stethoscope is silent. It is not that physical examination is not a most valuable means of acquiring certain information; but that this other information is apt to be overlooked or under-estimated; and thus a good proportion betwixt the two means of examination is lacking.

A cough is a forced expiration to eject some offending materials from the air-tubes just as a sneeze clears the nares. But suppose the offending or irritant matter cannot be ejected, what, then, is the value of the cough? Nothing whatever. There is then much useless cough, as well as useful cough. Other matters than something in the air-tubes may set up a cough. Thus we find cough equally present when there is some phlegm in the air-tubes; when there is a mass of tubercle undergoing softening; and in the pulmonary congestion of mitral lesion. A crumb in the larynx will provoke violent cough; and so will other laryngeal irritation. All know the brazen, trumpet-like cough of aneurism of the aortic arch pressing upon the recurrent laryngeal nerve, a cough closely simulated in character at times by a neurosal cough. This last was so marked in two girls that their cough told when they were on the hospital premises. It is needless to say their departure was always expedited. Then, cough in the form of "hawking" is exceedingly common in pharyngeal disburbance.

There is, too, cough unconnected with the air-passages and the respiratory organs. There is the well-known cough of pregnancy, the "nine-months" cough." There is ear-cough said to be connected with the tympanic branch of the glosso-pharyngeal nerves, set up by irritation in the ear. There is the cough of gastric irritation, common with alcoholic indulgence. In one case, at least, known to me, diarrhœa always set up cough. Cough of the "hemming" character, often misinterpreted as the short cough of early phthisis, is found com-

monly in girls at the age of puberty, linked with ovarian or spinal irritation. It is clear, then, that cough has various causal associations.

The importance of a reflex cough need not be considered here; nor yet the means by which it may be relieved. In all reflex actions the bromides suggest themselves at once. If the exciting cause can be dealt with, then the resultant cough is relieved.

It is rather the intention here to consider cough from its clinical and therapeutic point of view, and to see what indications it furnishes us for treatment. For instance, in "heart cough," *i. e.*, where the cough—a hard dry cough—is set up by congestion of the pulmonic or lesser circulation by some dam or block at the mitral ostium, sedatives are most undesirable.

Such cough is most commonly found in a young girl with a mitral lesion. One such case I well remember when the resident medical officer of the Leeds Public Dispensary. The girl, a child of twelve, had a mitral regurgitation—an injury inflicted upon previous to her coming under my notice. Digitalis and iron improved the general condition, and with it the amount of cough; but still the child, a bright neurosal creature, coughed considerably. She ceased to attend, but some weeks later her mother came and made a frank confession to this effect: "Doctor, I thought the girl ought to have some cough medicine and when I asked you for it, you always refused to give her any. One day I came when I knew you would be out, and got one of your assistants to grant me some cough stuff. It acted like a charm; but she soon fell off and lost her appetite, and could not get about; and now there is dropsy in her ankles. She is so bad I want you to do what you can for her." Appropriate treatment soon restored the child to her ordinary condition; but her mother did not hanker after cough medicine after this experience. This case illustrates vividly the disastrous effects of allaying the cough when due to pulmonary congestion. For a little time it gave relief, but the after condition was worse than the first. So much for the indication afforded by the cough under one set of circumstances, the case just mentioned by no means standing alone.

The consideration of "useful" and "useless" cough may now engage our attention. It is a matter involving the greatest thought, and well deserves our best consideration. We will take cough in bronchial cases first. There is in the early stages of acute bronchitis much useless cough set up by the dry mucous membrane, and the means for its relief have been set forth in a preceding article ("Bronchitis, Acute and Chronic"). Then it was said there existed no particular objection to opium, which gives great relief. But in such cases the sedative is combined with other agents of a relaxant character, as tartar emetic or aconite. As soon as free secretion comes the cough changes its character. It is no longer the dry harsh, shaking cough of ineffectual effort, raising nothing, but becomes the less painful, truly expulsive cough of successful effort. Now, what we are required to do is to give stimulating expectorants, and so help and improve the character of the expulsive cough. There is usually at this point no indication for opium, and none is required unless it be a little at bedtime in certain cases.

It is rather in bronchitis with little expectoration and much bronchial irritation that the question of decision taxes our best mental energies. In some cases the rest at night is broken by irritant cough, and then the question arises of the lesser of two evils. If the opium arrest the secretion, and so render it tougher and more difficult to get up; if the opium brings lethargy to the liver, impairing the appetite, and locking up the bowels, still it gives the patient rest. Consequently it may become necessary to administer it. But it should be given with benzoic acid in compound squill pill and a little podophyllin or watery extract of aloes to counteract its undesirable effects in the alimentary canal. And by such combination no doubt the maximum of good with the minimum of bad effect can be secured. Number of chronic bronchitics under my father's professional care took such a pill every night for years without apparent injury, while it added greatly to their comfort. (I refer to my father's experience in these cases because I served under him and saw his practice, my own experience of general practice being but short). But granting all this, the less opium in diseases of the respiratory organs the better—as a broad rule Sometimes some chloral, or bromide of ammonium with tincture of hyoscyamus, may seem indicated rather than opium, or even camphor may be the best agent to employ in certain cases. But, in a general way, opium (in such pill-combination as has just been suggested), with some alcohol at bed time as a "night cap," *i. e.*, whiskey or brandy and hot water, taken on getting into bed, is the best practice with chronic bronchitis. One great matter there is in such cases, never to be lost sight of by the patient, and that is to avoid passing from a warm sitting-room to a cold bed-room; the bedroom should also be warm. Another is to have the bed warmed by the old-fashioned warming pan, or perhaps better still, by a hot water bottle, which can be pushed down to the foot of the bed (so as to keep the feet warm) when the patient gets into bed. This matter of an equable temperature is very important, and many bronchitics toast themselves well before going upstairs to cold unwarmed bedrooms, where they cast off their day clothes, don a cold night shirt or gown, as the case may be, then kneel down and say their prayers, and get into a cold bed. It is needless to say that no medicinal course can be successful in a case where this goes on.

Important as is the matter of cough and its indications for treatment are in chronic pulmonary phthisis to even still more important. There is the cough in the night breaking the sleep, there is the cough in the day shaking the sufferer; both ob-

jectionable and undesirable, and requiring to be dealt with. The circumstances under which cough is developed in pulmonary phthisis vary. Sometimes mere apex consolidation is accompanied by cough. Where there is bronchial implication and localized bronchitis in the affected area this can readily be understood; but at times there is cough without the moist rales indicative of this condition. We are compelled here to suppose some irritation of the pulmonary fibres of the vagus, which is transmitted to the respiratory centre, leading to discharge producing the modified inspiration and expiration familiar to us as "cough." Belladonna is said to exercise a decided influence over these fibres, and so is indicated in such condition. (By this property belladonna, or atropine, is a desirable addition to an opiate for a night-pill.)

It has also been claimed for gelsemium sempervirens that it is useful in such cough by its action upon the nervous mechanism of the respiration. Bromide of ammonium suggests itself at once for the relief of such cough, from the known utility of the bromides in the reflex trouble.

One curious point there is about cough in its relations to static pulmonary consolidation, and that is this. Whenever a person possessed of a patch of consolidated lung has also the liver upset then the irritation in the said patch with resultant cough is marked. No cough medicines nor antispasmodics do any good; but agents which act upon the liver, as a blue pill at bed time (or other mercurial), and a dose of sulphate of soda next morning produce a distinct and unmistakable effect in lessening the cough. Consequently, when a patient complains of troublesome cough and an area of consolidated lung is found, it is often well to inspect the tongue and inquire into those subjective sensations experienced when a person is bilious or "liverish." From its known effect upon the liver, opium not only gives no relief, but positively aggravates the condition.

When a tubercular mass, or a proportion of the consolidated area commences to soften—probably by the proliferating cells being so crowded on each other that they die; possibly by the appearance of bacilli on the scene—then we can readily understand the oncome of cough, and often severe cough. The dead mass is an irritant—like the thorn of Van Helmont—as a process of ulceration cuts it off from the surrounding lung tissue; and during the time the process is going on there is distinct local irritation setting up cough. There is, too, hectic fever, with nocturnal pyrexia and night-sweats. In this condition it may become necessary to add some opium or morphia to the mixture of quinine and phosphoric acid so much in vogue for its relief; and whether any sedative must be added or not, and, if so, what quantity, is a matter to be decided by the merits of each particular case. That some morphia is unavoidable to procure sleep in such condition goes without question; but it must be guarded by the additions suggested in the article on "Pulmonary Phthisis." Such a condition is like a specific fever, or a storm at sea, in that it comes to an end sooner or later, and if the organism can be kept going, or the ship afloat till the end comes, all is well. Of course if there be but one softening patch the irritation set up is smaller than when there are several such morbid areas. In the latter case, opium in the day may be unavoidable; and its drawbacks must be met and got rid of, or neutralized, by such wit and skill as the medical attendant can command, either in himself or some consultant of more experience or deeper thought. Above all things, keep up the powers by such food as the patient can take. The fever usually brings with it thirst. Then let the patient have cold beef-tea, with baked flour in it; malt extract, with effervescing water; milk, with mineral water or whey; or milk diluted with water and some Mellin's food added; and good home made lemonade, with a fair amount of acid and sugar or malt extract in it. Rice water, or barley-water or tamarind-water may be relished. Grapes and the juice of fruit are excellent. Alcohol may, too, be indicated. Sometimes it is neck or nothing. The patient must be heavily dosed with opium to allay the paroxysms of cough, aye, and there is something more than cough, viz.: the danger of hemorrhage from the ruptured bloodvessel in the softening area, brought about by violent effort at cough. The poor patient is like a soldier with bullets flying over his head; if he escapes one, the other hits him. The patient is passing through a period of acute perils; perhaps rather he is like a canoe shooting rapids studded with rocks; much, very much, depends upon the boat-man's skill and experience; something upon luck—and the patient's luck is the luck of a good constitution! If the softening areas be numerous and extensive, then the prospect of escape is small, and the skill of the steerer will be gravely taxed. In spite of everything that skill and assiduous attention can do or accomplish, the case may go on from bad to worse unto the inevitable end.

But, in my own experience of phthisis, cough has not been so very prominent a matter as to require treatment in the day except in a few instances. It is not common for the consumptive to be shaken by racking cough requiring opium in the day. And on enquiring of an experienced sister at the hospital, who has watched the practice of many physicians, including the late Dr. Peacock, she informs me that my personal experience is in harmony with that of other physicians at Victoria Park Hospital. It is at night that cough is prevalent, and the use of opium in combination with other agents, to procure a good night for the phthisical patient, is a matter upon which there is a general agreement.

When there is one or more cavities present the use of opium is not effected by the fact. Indeed a cavity is a matter of little moment one way or the other, therapeutically. Of course the patient is no better for having a cavity, but the question is, is he any worse? Patients with cavities die,

certainly, and patients with cavities leave the hospital very greatly benefited by their stay. As to question of cough and its treatment, a cavity counts for nothing; the cough certainly may be connected with its contents, or perhaps the condition of its wall. But the fact of the patient being in the third stage of phthisis (following the classification of Pollock in his "Elements of Diagnosis in Phthisis") does not effect the treatment.

Finally in dealing with cough the physician must observe and reason upon the cause of the cough, what it accomplishes, and how it affects the patient before proceeding to deal with it. Some cough is useless because ineffective, and needs some stimulating expectorant to render it efficacious—a very common affair; some cough is useless from every point of view, and so requires a sedative; and here the physician must decide in each case which is the lesser of two evils—the cough or the sedative.—*London Med. Record.*

FEEDING BY RECTUM.

By W. Julius Mickle, M.D., M.R.C.P. Lond., in *The Practitioner*.

There are many cases in which rectal feeding is beneficial; there are others in which it may become necessary for the saving or the lengthening of the patient's life. But I have no wish to unduly extol the rectal method of feeding, or to suggest its use when the more natural methods are feasible and effective.

The cases with which this paper is concerned may be spoken of as in several groups, loosely associated, for the moment, with reference to their suitability for the use of nutritive enemata.

Thus we may bring together cases, such as cut throat, inflammation of throat from the swallowing of caustic substances, diphtheria, diphtheritic paralysis of the throat, severe stomatitis or quinсy, post-pharyngeal abscess. Or, again, where the œsophagus is compressed, or cancerous or strictured; or in spasm, made worse by attempts to swallow or to pass a tube, such as spasm of œsophagus in cerebritis, and some aggravated cases of hysterical spasm. Laryngeal phthisis, or syphilitic (and other) laryngeal stenosis, with extreme dysphagia, may indicate and justify rectal feeding.

Another group consists of gastric and abdominal affections often associated with vomiting and severe pain on eating—affections such as cancer, ulcer, atrophy or severe catarrh of stomach; or dilatation of stomach, with severe pain and vomiting; or extreme dyspepsia and irritability of stomach; or obstinate vomiting with ovarian disease, or with hysteria, or of uncertain origin; some cases of obstinate obstruction of intestine and vomiting, or of ulceration or hæmorrhage of small intestine; tabes mesenterica; peritonitis; renal calculus with reflex gastralgia and emesis.

Still another group consists of cases in which nutritive rectal injections may be given in affections such as the anæmias, neuralgia, phthisis, or to supplement the work of the stomach where there is either general or digestive weakness.

There is another group of cases in which the use of rectal feeding is highly advantageous. It consists chiefly of cases of apoplexy, or of excessively frequent and severe epileptic convulsions; or, again, epileptiform seizures, or of severe apoplectiform attacks, with stupor and coma. Seizure of the e kinds are to be frequently found in general paralysis, and in various local, in "focal" softening or hæmorrhage; in thrombosis, embolism, or the various local pathological sequelæ of these or of brain injury. In many of these cases the attempt to feed the patient by mouth ends in the food, whether liquid or solid, being inhaled into the lungs. Even the attempt to feed by stomach-pump, by œsophageal tube, by nasal tube, or by funnel—or, in fact, to in any way get the food into the stomach—is sometimes followed by severe dyspnœa and threatened asphyxia. But the danger to which I would now particularly draw attention is that the introducing of food by this route sometimes occasions vomiting; or vomiting may be present independently of the passing of any tube. Here, then, is a patient who is helpless, or in stupor or coma, or paralysed, or convulsed, or anæsthesic locally, according to the circumstances in each case. If food is now successfully placed in the stomach—and this in many cases is difficult, in some impossible—it may not be retained there, but being only ineffectually and partially vomited or eructated, may be at once inhaled into the air-passages, be drawn into the bronchioles and alveoli, increase the already existing pulmonary congestion, and the patient being in a state of depressed vitality, and there being difficulty in the throwing off of secretions and foreign substances by the lungs owing to this, to the local engorgement of the parts, and to the feeble expiratory power at the command of the automatic mechanism—the inhaled and not expelled food may set up a rapid destructive form of lobular pneumonia, or even of lobular gangrene. Under these circumstances even the salivary and other secretions, if inhaled, appear to be harmful, and the lungs and kidneys are congested for the time, albumen and even blood-cells and casts being often shed by the latter. It is unnecessary to insist upon the importance of rectal feeding in many of these cases.

Tetanus in another form of nervous disease in which rectal feeding is highly serviceable.

As I do not wish to deal with the present subject from the point of view which particularly offers itself to me as a specialist, I shall merely mention —and this only in order that I may not ignore it —the enormous usefulness of rectal feeding in some cases of insanity with refusal of food, if and when the passing of an œsophageal tube causes vomiting or severe dyspnœa, or with such insane persons as refuse food and resist being fed, when, by reason of their diseased state of brain, heart, or lungs, efforts and straining against the stomach-tube endanger life.

In all these cases rectal feeding is useful when food is refused, or if swallowed tends to get into the bronchi; or when the passing of a tube brings on vomiting or suffocative spasm; or when the food regurgitates or is vomited with likelihood of getting into the air passages; or when the resistance made by the patient endangers life, owing to the effects of effort upon frail but vitally important organs.

If, then, one *has* decided to feed by the rectum, the next questions are: What are the best forms of nutriment to employ, and what are the best special modes of manipulation in introducing the food into the bowel?

As to the former, the question of the best form of nutriment for use for injection, the older plan, and the one still most in vogue, is merely to inject fluid food and stimulants, not specially prepared, but in the form in which they are taken by the mouth. Beef tea, milk and brandy have been largely used for this purpose, and I have heard of arrowroot being so used in considerable quantities.

Some amount of stimulation can be attained by the use of the substances just named, and from them can be absorbed constituents which enable the nutritive powers better to utilize the stores of nutriment already within the system. But for true food purposes their value is apparently slight. As Dr. Sansom stated (*Lancet*, February 19, 1881) only a fractional proportion of the albuminous contents of nutritive enemata, as commonly employed, is taken up into the blood current to subserve any useful purpose of nutrition. This fact has led to many attempts to improve upon the ordinary nutritive enemata.

The use of various digestive substances with the food injected has been tried, and many experiments, as well as observations which have practically the bearing of experiments, have been made.

Thus M. Catillon fed two dogs for two months by rectal injections of eggs only. One, which received eggs only, lived with difficulty and lost weight; the other, which had eggs, glycerine and pepsine, kept well and kept up weight, but when the pepsine was omitted, he too lost weight and his temperature fell.

In further observations, firstly, meat, bread and potatoes were taken, then no meat for three days, and the amount of urea excreted and the bodily weight both fell; then for one week peptones of meat were taken and the urea and weight went up again; next, for four days enemata of peptones only, and the weight was constant and the urea proportioned to it; next, low diet, no meat or peptones, and urea and weight fell. For a sustaining ration he suggests about five oz. of saturated solution of peptone, and for nutritive enemata, peptone of meat (saturated solution at 19° C.), 40 grammes; water, 125 grammes; laudanum drops iii.; sodii bicarb., 3 gramme (about 5 grains).

Czerney and Latschenberger, whose experiments were conducted on a man's colon, through fistulæ following gangrene of an irreducible scrotal hernia, found that while little benefit comes from raw material in the bowel, much improvement in health and strength results if substances are previously partly digested, as, for instance, if fat is emulsified, albumen reduced to a soluble state and starch converted into glucose.

Marchwald is rather a pessimist in this matter. From his observations on a case in which the anterior wall of a cæcal hernia had sloughed, he concluded that the colon does not convert starch into sugar, nor digest fibrin or coagulated albumen, though putrefaction occurred and peptones formed; nor absorb ready-made peptones or fluid albumen; while it absorbs water slowly, and a little peptone, especially that formed in the bowel itself.

On the whole, I conclude that the rectum and colon digest but little, and that, even when inverse peristalsis is set up, the action of the bowel upon enemata is chiefly absorptive. If so the food should either be introduced mixed with digestive substances, or else, before administration, should, in some way or measure, be digested and ready for absorption into the venules and lymphatics of the intestinal walls. Several methods have been devised to attain these objects.

Thus Dr. Leube gives three parts of meat with one part of pancreas, both finely minced and mixed with a little water. An addition of fat does not harm the digestion of the meat and pancreas when injected, but more than one-sixth of fat is apt to cause stool. Brown Séquard's plan is first to clear out the bowel by an enema of luke-warm water, and then by a wooden syringe inject into the bowel two-thirds of a pound of raw beef and a quarter of a pound of hog's pancreas. Repeat twice a day. The pancreas must be fresh, the animal recently slaughtered, the fat and cellular tissue taken away. The meat and pancreas must be very finely divided, and thoroughly mixed. M. Catillon's formula I have already given above; when speaking of his experiments; it represents a peptone of meat. M. Henninger gives a complicated formula for a peptone of meat by digestion of meat under HCl and pepsine. Slinger has manufactured a nutrient suppository, consisting of nearly pure peptones, made by digesting lean meat with the mucous membrane of the pig's stomach. Numerous new preparations are brought before the profession each year.

Defibrinated blood and solutions of desiccated blood have been used for enemata, and especially in America. Three years ago, when I was on that side of the water, and met some medical men in consultation in reference to a certain case, in which the question of feeding by rectum arose, I found that the medical attendant at once suggested a solution of dessicated blood, which is usually employed there, I believe, in the proportion of one to eight of water for injection. Fresh defibrinated ox or sheep blood appears to be considerably used in America for nutritive enemata, as Dr. Sansom was one of the first to tell us.

In his Lumleian Lectures, Dr. W. Roberts* states that "pancreatic extract is peculiarly adapted for administration with nutritive enemata. The enemata may be prepared in the usual way with milk-gruel and beef-tea, and a dessert spoonful of pancreaticus should be added to it just before administration. In the warm temperature of the bowel the ferments find a favorable medium for their action on the nutritive materials with which they are mixed, and there is no acid secretion to interfere with the completion of the digestive process."

In actual practice I have departed considerably from this plan of Dr. Roberts, preferring to inject food in the already peptonised form, and ready to pass from the bowel by absorption For enemata, therefore, I have used, in a slightly modified form, his method of preparing the food as if for administration by mouth. A thermometer being employed throughout, and either kept in the liquid or frequently introduced to test the temperature, a pint of milk with one-fifth or one-fourth pint of water is heated in a clean dish to 140° F. At that temperature, two drachms of Benger's liquor pancreaticus are added, and twenty grains of bicarbonate of sodium dissolved in a spoonful of water. The whole is put into a covered jug or dish, and kept near a fire for from an hour to an hour and a half, and still kept constantly at a temperature of 140° F. At the end of that time it must be thoroughly boiled for two or three minutes. Each step should be carefully carried out to secure success. Thus prepared, the food keeps for half a day or more. For convenience, I have given the process as for one pint of milk, but multiples of that measure may be prepared. In feeding by rectum, I prefer to keep to this peptonised milk solely.

The following, from Dr. Roberts, chiefly useful for administration by mouth, may be given by rectum also.

For peptonized gruel; wheaten flour, oatmeal, arrowroot, sago, pearl barley, pea or lentil flour, gruel well boiled, thick and strong, Oj; put in a covered jug, cool to about 140° F., add liq. pancreatici ℥ ss. Keep warm under a cosey for two hours, boil and strain.

For peptonized milk gruel, thick hot gruel, cold milk, equal parts. To each pint add liq. pancreatici ʒ ij—iij., and sodii bicarb. grs. xx. Keep warm in covered jug for two hours; boil for a few minutes and strain.

For a peptonized beef tea: half pound finely minced lean beef, water a pint, sodii bicarb. grs. xx.; simmer for one hour and half; cool to 140° F.; add liq. pancreatici ℥ ss. Keep warm under a cosey for two hours; occasionally shake. Decant liquid portion and boil for five minutes.

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* *Lancet*, May 29, 1880, p. 828

CHOREA SUCCESSFULLY TREATED WITH HYOSCYAMINE.

In a clinical lecture recently delivered in the Pennsylvania Hospital by Prof. Da Costa (*Med. Times*, January 23, 1886), a patient was exhibited suffering from what Dr. Da Costa described as the worst case of chorea that he had ever seen. The patient was a boy about 11 years old, pale and weakly, and described by his friends as having always been nervous.

Four weeks before the date when he was admitted (on the 14th of December) he had an attack of acute rheumatism, which involved all the larger joints of his body. The rheumatism lasted about three weeks, but as it declined choreic symptoms began to be manifested. His hands and arms were first affected, and afterwards his legs.

When admitted, he was actually unable to walk; he was even unable to feed himself, and seemed in risk of starvation. He was wretchedly weak and emaciated. He could perform no co-ordinated movements with his arms or legs, and unless there was always somebody about to give him a drink of water and food he would have perished. This was not due to actual want of power in the muscles, but to the impossibility of performing any voluntary act requiring co-ordinated movements; yet when food was placed in his mouth deglutition was readily accomplished. When admitted he could not speak, he could not articulate a word. He could not put out his tongue, although he could open his mouth and move his jaws, but he could not ask for food. His expression was that of an imbecile, and he was reduced to a mere shadow.

At first his arms and legs were constantly moving, both sides being equally affected. No power of grasp existed in his hands, though sensation did not seem impaired. He complained of pain when he was pinched. The patellar reflex was normal, and not exaggerated. No marked change in the electrical reactions was observed. His pupils were very much dilated; his pulse was only 50 per minute, and rather weak; there was a systolic mitral murmur heard at the apex. These involuntary muscular movements did not continue at night when he was asleep. His urine had been examined but neither albumen nor sugar was detected. His bowels tended to constipation.

The ordinary remedies for chorea act slowly; arsenic, though one of the best of our therapeutic agents for this disorder, acts slowly: it takes time, and the loss of time here might be fatal. Dr. La Costa then recalled a case of tremor which he had seen rapidly influenced by hyoscyamine, the active principle of hyoscyamus niger. He concluded to try it here. He ordered him to take $\frac{3}{2\,0\,0}$ grain to begin with, a decided dose for a boy of his age; but, not finding any marked influence, he concluded that it would be advisable to increase the dose to $\frac{1}{1\,0\,0}$ grain, given three times a day. Now the effect was admirable. From the first few days the boy began to improve, and at this time he had

some dryness of the throat and wanted his mouth frequently moistened. He soon became brighter in his mind; he took more interest in what was going on; he moved voluntarily in bed, and tried to help himself to food. His voice also returned, and he left his bed and began walking around the ward. After this his recovery was rapid and uninterrupted. He has had no other treatment than the hyoscyamine, and he has now so much improved, though he is still somewhat pale, that he may be looked upon as having recovered. He can sit quietly; he has power over his hands, both in co-ordination and in grasp, although his grasp is still a little feeble. He walks and stands now without falling. His pupils are dilated, although not much.

The systolic apex-murmur persists: it is a chronic mitral regurgitant murmur. In every other respect the boy is nearly well.

Dr. Da Costa then referred to one or two points of clinical interest in connection with this case: first, some points which have nothing to do with the treatment; and, secondly, some which bear upon the treatment.

In the first place, this attack of chorea was clearly of rheumatic origin. It came on at the end of an attack of acute rheumatism. It is true that the boy was previously feeble and *ill*-nourished, and that he was regarded as a nervous child; but the association of chorea with rheumatism is too close a one for us to regard it here as a mere coincidence. You can generally trace, in a case of chorea, a strong rheumatic element, either inherited or acquired. In this form, before the patient has left his bed or his attack of rheumatism is clearly over, the chorea is manifested, which makes the connection still closer. Now, it has been thought that there is an embolic process at work in the smaller blood-vessels of the motor centres in the brain and spinal cord; small vegetations which are formed upon the valves are washed into the arteries supplying the motor tracts especially the corpora striata, and the subsequent disturbances of nutrition gave rise to the irregular, unco-ordinated muscular movements. This is a plausible and ingenious theory; yet it is hardly sufficient to account for all the features of the disease. There must be some want of stability of the motor centres, independent of the coarse lesions resulting from embolism, the evidence of the existence of which, moreover, is not complete, and which is certainly not constant.

In the case reported there was no voluntary control over the muscles, and at the same time the mind seemed to suffer: he was almost an idiot. When admitted, his temperature was $98\frac{1}{4}^{\circ}$: therefore the attack of rheumatism was over, and these symptoms were not due to a fresh outburst of the rheumatic affection. The want of power in these muscles must also be taken into consideration, as showing a close relation between chorea and paralysis.

Now, coming to the question of treatment, the influence of the hyoscyamine, which was suggested by analogy from the treatment of tremor, was here strikingly manifest. The dose was increased from $\frac{1}{200}$ to $\frac{1}{150}$ grain without any bad effects; but when he was taking this quantity he complained of some dryness of the throat, although it never was so severe as to require us to reduce the dose again. It was finally discontinued two days ago. Now he is perfectly steady and can control his movements; his tongue is clean and he has a good color; he is gaining flesh: indeed, he may be considered as well.

Did the hyoscyamine produce the striking effect or did the rest in the hospital do it? That rest is good in all and can cure many cases of chorea, is admitted; but the improvement here was too sudden—coming on in three or four days—and too great to be attributed entirely to the good nursing and the food which he received since he was admitted. It is claimed that hyoscyamine is a valuable antispasmodic and exercises a remarkable control over muscular movements; also that with the control of the movements the condition of the muscles is improved and all the functions increased. Even the blood has improved; for, though he is still anæmic, he is not so much so as he was. Within a week after beginning the treatment he was out of bed and walking around, but not so well as at present.

What shall be given further? Will not the condition remain? Not necessarily; for all the irregular muscular movements have ceased. He can take, however, for his anæmia, the elixir of the pyrophosphate of iron, a drachm three times a day, and stop the hyoscyamine as having accomplished its purpose.

AMENORRHEA.

Dr. Skene, gynecologist to the Post Graduate School of New York, writes as follows on amenorrhea in the *Medical News*. In organic diseases, especially those of the liver, heart, lungs, or kidneys, in the advanced stages, we may look for derangements of menstruation. Amenorrhea is naturally a consequence of hepatic or heart affections, but in renal diseases the pathology is not so easy of explanation, as it is perhaps less mechanical than the former. I presume in amenorrhea occurring from renal disease, that is due more to malnutrition, tissue deterioration, and anemia. The point, however, to which I specially call attention is the necessity for us to look well to the general organization in obscure cases, and seek there the causes of amenorrhea, rather than in the pelvic organs themselves.

I would next call your attention to the management of amenorrhea in chlorotic patients. This condition, known as chlorosis, presents that peculiar form of organization in which we have a partial arrest of the development of the circulatory apparatus and sexual system.

The consequence arising from this insufficient development is that amenorrhea is the rule, as is also anemia. In chlorosis especially, the blood-making organs are sluggish and defective, the heart action is feeble and easily gives out; they become tired easily on the least exertion. Such individuals cannot afford to menstruate, although they may do so under ordinary circumstances. But the moment you put a tax upon the system by which their vitality is used up in other channels, they become very anemic and amenorrhea follows.

You will also find that these patients do not respond well to restoratives and tonics, as will any well-developed organization that is simply suffering from anemia for the time being, because of this peculiarity of organization which I have just described. We give them iron and good nourishing diet, and they improve so slowly and fall back so often that you will find the alterative tonics effect by far the most satisfactory results. You can, of course, never change the organization, or make a well developed, ruddy, vigorous woman of such a patient. In these cases you will find iodine, in the form of iodide of iron, answers well; this, however, is better in the strumous diathesis. In these cases of chlorosis we find that in mercury small doses is one of the best possible tonics. I know that if you give from one-thirtieth to one-fiftieth of a grain of the bichloride to a chlorotic patient three or four times daily, she will improve under the treatment, especially if you add the chloride of iron.

We must also remember that in the chlorotic girl the nervous system is below par, which would indicate the administration of chloride of arsenic. Such patients are likely to be dyspeptic, indicating a lack of gastric juice or its properties; hence, we administer hydrochloric acid. These remedies are contained in the mixture called "the four chlorides," viz., chloride of iron, chloride of arsenic, bichloride of mercury, and hydrochloric acid. Under this treatment it is surprising how these pale, greenish-yellow looking girls will improve; but you must continue it for some time in order to obtain the best possible results.

Some may ask, "Are you not afraid to give one-fortieth of a grain of the bichloride of mercury for a long time." I have given it for two months regularly, and then stopped for one or two weeks, and then again continued it for one month longer, with out any bad effects whatever ensuing. I have also known it to be given for a longer period than that most marked beneficial results.

The rule is that amenorrhea appears in the advance stage of phthisis pulmonalis; when patients are in the third stage of the disease the menses becomes scanty, and finally cease altogether. But there are exceptions, and this case now before you well illustrates such a one. Where amenorrhea occurs in the first stage of phthisis, it seems to come simultaneously with the lung trouble. In this case it is evidently conservative; a patient with marked degeneration of the lung suffers from impairment of the whole nutritive system; she cannot afford to menstruate.

The cause here is organic disease of the respiratory organs, and until that is removed we can do nothing in the way of treatment for her amenorrhea. I insist upon this, and cannot impress it upon you too strongly, as upon this subject the laity, you will find, will have a great deal to say. Again and again have I been them insist that the amenorrhea was the cause of the pulmonary difficulty; they would insist upon giving the patient hot foot baths, hot drinks of all kinds, with decoctions of herb teas innumerable, in order, as they said, to establish menstruation.

SCHULTZE'S SWINGING MOTIONS TO REVIVE ASPHYCTIC NEW-BORN CHILDREN.

Prof. Schultze, of Jena, attracted the attention of the entire medical world when, a good many years ago, he first published his now famous mechanical method to revive new-born children laboring under asphyxia. The question whether a new-born child be actually still-born, and no vital energy be present at all, or whether the spark of life be really latent, ready to set agoing the functional mechanisms under appropriate stimulation, belongs to the most important problems that present themselves to the practitioner.

From a description of Schultze's swinging motions appearing in the December issue of *Schmidt's Jahrbücher* we make the following translation:

The child is caught by its shoulders, so as to place the thumb on the anterior surface of the thorax, the index finger in the axilla from behind, and the other three fingers of each hand transversely across the back, thus supporting the drooping head on the ulnar edges of the palmar aspects of the hands. Then spreading asunder one's feet and inclining the head somewhat forward, the child is swung with outstretched arms upward to an angle of 45°; then the swinging is stopped. The entire weight of the child rests at this moment on the thumb of the physician, which is pressed against the thorax of the child. This position occasions a considerable compression of the thoracic viscera not only from the diaphragm, but also from the chest-walls. This passive expiration occasions often a discharge of the aspirated fluids through the respiratory channels. Then the physician moves his arms downward, and swings rapidly the child toward his feet, whereby the thorax of the child is widened. As the child hangs by its upper extremities, and the sternal ends of the ribs are fixed, its own weight goes to elevate the ribs, while the diaphragm recedes on account of the shock imparted to the abdominal cavity. This equals a mechanical inspiration of a considerable importance. After a few seconds the child is again swung upward, and the aspirated fluid is then usually discharged.

WATER AS A DIURETIC.

In an article on the action and use of diuretics, in the *Practitioner*, Dr. T. Lauder Brunton says that water is, perhaps, the most powerful diuretic we possess, although fewer experiments have been made with it upon animals than with the others. The diuretic action of water drunk by a healthy man is very marked, and it appears impossible to explain its elimination by a mere increase in blood-pressure, whether general or local. It has the power of increasing tissue-change, and thus multiplying the products of tissue-waste which result from it, but it removes these waste products as fast as they are formed, and thus, by giving rise to increased appetite, provides fresh nutriment for the tissues, and thus acts as a true tonic. In persons who are accustomed to take too little water, the products of tissue-waste may be formed faster than they are removed, and thus accumulating may give rise to disease. If water be freely drunk by such persons, the products of waste will be removed and health maintained or restored. Many gouty persons are accustomed to take little or no water except in the form of a small cup of tea or coffee daily, besides what they get in the form of wine or beer. In such people a large tumbler of water drunk every morning, and especially with the addition of some nitrate or carbonate of potassium, will prevent a gouty paroxysm. Still more numerous, possibly, is the class of people who arise in the morning feeling weak and languid—more tired indeed than when they went to bed. Many such people are well fed, they sleep soundly, and it seems almost impossible to believe that the fatigue which they feel in the morning can result from imperfect nutrition, more especially as one finds that after moving about, the languor appears in a great measure to pass off. It seems that this languor must depend upon imperfect removal of the waste products from the body, as we know that the secretion of urine in healthy persons is generally much less during the night than during the day. Such people should drink a tumbler of water before going to bed in order to aid the secretion of urine and of the waste products during the night. In some cases, though not in all, the result has been satisfactory, and possibly might have been still more so, if the bicarbonate and nitrate of potassium, which are so useful in cases of gout, had been added to the water.

Lately a plan of treating gout by draughts of water at intervals during the day has been a good deal employed, and is in many cases successful. The following is a diet used along with this treatment by a medical friend:

7.30 a. m. Ten fluid ounces of very hot water. 8 a. m. Breakfast: equal parts of weak tea and milk, a small quantity of white sugar, a slice of fat bacon without a strip of lean, bread and fresh butter. 1 p. m. Milk-pudding, rice, sago, tapioca, macaroni, or blanc mange, and small biscuits with butter, ten fluid ounces of hot water. 4 to 5 p. m. Ten fluid ounces of hot water. 6 p. m. Dinner; white fish or fowl (usually boiled), greens, bread, no potatoes, claret seven fluid ounces. 8 to 9 p. m. Ten fluid ounces of hot water. 11 p. m. Ten fluid ounces of hot water.

If he indulges either in meat or game, or drinks copiously of claret, or omits one or two glasses of hot water, he feels gouty or gravelly next day. It is obvious that by this plan of treatment, in which the ingestion of nitrogenous food is most strictly limited, at the same time that every facility is given for the elimination of the products of nitrogenous waste by the large quantities of hot water drunk in the course of the day, the accumulation of waste in the tissues ought to be most effectually prevented.

TREATMENT OF CHOREA.

Dr. Gilbert, of the Hôpital des Enfants-Malades in Paris, lecturing on the therapeutics of chorea, said:

The routine treatment of all choreic patients at the mentioned hospital consists in the systematical exhibition of chloral hydrate and the application of the wet cloth. The reason why chloral fails in the hands of so many practitioners is not to be sought in the drug itself, but in the faulty method of its administration. In two little patients, some time ago, Gilbert gave fifteen grains of chloral every quarter of an hour until sleep was produced, and when the children awoke the same dose was again administered. In this manner a sleep was obtained which was in reality but twice interrupted in twenty-four hours, just the time needed for two meals. After four or five days the drug has to be stopped, as it would be dangerous to prolong this profound and continuous sleep. The results obtained by this method of treatment compared very favorably with those of other clinicians, who usually contented themselves with sufficiently large doses to produce sleep once or twice daily, and rarely pushed the medication beyond a couple of days. At present Gilbert gives chloral systematically three times daily, and for a period of two weeks to two months, until a cure is perfected, without ever having met with a single accident. A rubeoloid or erythematous eruption, unaccompanied by constitutional manifestations, has occasionally been noted, but disappeared spontaneously in twenty-four hours, even when the medication with chloral was continued.

This uniform method is intended to ameliorate the graver symptoms, and to procure a prolonged sleep. A choreic patient ought not only to sleep at night, but also once or twice during the day, preferably after meal-time. The question of dose is one of great importance. Gilbert gives in a patient beyond ten years of age, habitually sixty grains *pro dies*, fifteen grains in the morning, fifteen at noon, and thirty at night. This form of medication is to be continued until the choreic agitation is completely under control. In order to disguise

the disagreeable taste of the drug, the confection of chloral recommends itself, especially in the case of children. The confection is prepared by taking a watery concentrated solution of chloral and currant-jelly.

It is only in the graver form of chorea, in which chloral alone does not suffice to suppress the nervous and muscular excitation, that the wet cloth comes in as a potent adjuvant to the drug. As to its application, cold water solely is to be employed. The cloth is dipped into it, moderately expressed, and the patient laid upon a mackintosh covered with a rubber cloth. The body of the patient is then tightly wrapped up in a blanket and vigorously rubbed from the head toward the feet. After a couple of minutes, when reaction has taken place and the little patient has commenced to get warm, it is to be wrapped up in several woolen blankets without removing the wet sheet, leaving just the head free. In this sort of a steam-bath, then, the child is to remain on its bed for about half an hour, when reaction will have fully set in and done its intended work.

The effects of this procedure are invariably of the most excellent nature; the child feels calm and composed, and not rarely falls into a quiet and prolonged sleep, from which it awakens more tranquil than ever.

As these are the remarks of a well-known clinician with an extensive practice with choreic children, his method of treatment lays claim to our confidence, and invites a trial.

REMOVAL OF FOREIGN BODY IN THE URETHRA.

George Hunter, M.D., Linlithgow, Eng. *British Medical Journal.*

An elderly gentleman, suffering from dysuria, due to prostatic enlargement, attempted to empty the bladder by insinuating the rounded head of a veil-pin into the orifice of the urethra. The pin slipped from his fingers and disappeared in the urethra. Attempts at removal pushed the pin into the urethral canal, and were followed by discharges of blood and an urgent, but ineffectual, desire to urinate. Dr. H., being sent for, found the head of the pin in the membranous urethra, just in front of the prostate, the point being anterior to the scrotum. To remove it he fixed the head by pressing upon it from behind, forwards, and then impaled the urethra against the point. By steady pressure and traction on the point, the whole length of the pin was pulled through, only the head remaining in the urethra. The point was then depressed toward the perinæum, and, by compressing the flaccid penis in its longitudinal axis, the round head of the pin was easily passed through the meatus, and the entire pin withdrawn. Not a drop of blood was lost, and the puncture made on the under side of the penis was not more severe than that resulting from the use of an ordinary hypodermatic needle. Rest and quiet enjoined for twelve hours, but no other treatment. No sequelæ.

THE NOCTURNAL COUGH OF CHILDREN.

It not unfrequently happens that children are waked suddenly from quiet slumber by a violent and sometimes convulsive cough. This has been ascribed by McCoy to reflex irritation from accumulation of mucus within the nasal cavities. During the day the mucus flows away, but in the night it collects upon the sensitive areas in the nasal fossæ and excites a cough. Dr. Gonzalez Alvarez thinks this theory untenable, except in a few rare instances, and attributes the cough to laryngeal irritation. He says that the saliva and buccal mucus accumulate in considerable quantities, especially when there is stomatitis or gingivitis from dentition. Most of this is removed by the acts of deglutition which take place during sleep, but some does not so escape, but trickles into the posterior commissure of the larynx. He states that this cough occurs very frequently during the period of dentition, even when there is no nasal catarrh, a fact which leads him to reject the theory of nasal reflex irritation. The treatment of this nocturnal cough consists in diminishing the secretion by means of chlorate of potassium. A teaspoonful of a two per cent. solution is given every hour or two hours during the day, and at bedtime.—*Revue Bibliographique des Sciences Medicales*, November 22, 1885—*Med. Record.*

ICE TO THE SPINE IN OBSTINATE VOMITING.

Dr. W. L. Davis reports (*Mississippi Valley Med. Monthly*) a case of vomiting in typhoid fever in which every remedy, even pellets of ice, was rejected by the stomach. He applied ice to the lower part of the spine in considerable quantity, and the vomiting instantly ceased; a profuse perspiration followed. The use of ice was only persisted in when indicated; and cool sponging was instituted with marked benefit, so that the ice was only occasionally required. Recovery in the average time took place.

BISMUTH IN THE TREATMENT OF SWEATING FEET.

The *Union Medical* cites Vieuss's recommendation of daily frictions with subnitrate of bismuth as a remedy for fœtid perspiration of the feet. The spaces between the toes should not be forgotten. The treatment is to be continued for about a fortnight. After the second or third friction, the sweating becomes less abundant, and the soreness rapidly subsides. The epidermis soon loses its white tint, and adheres more firmly to the subjacent derma, the excessive action of the sudoriparous and sebaceous glands diminishes, the perspiration becomes less irritating, and about the sixth day the skin resumes its natural look.—*N.Y. Medical Journal.*

TREATMENT OF PULMONARY CONSUMPTION.

Dr. Da Costa's treatment we take from the *College and Clinical Record*, October 1st:

Hygienic Treatment.—Out-door exercise, good food, warm clothing; climate of paramount importance. The best climate, by far, is that found in Egypt; Algeria is a good place. In this country, New Mexico, Southern California, South Carolina, Thomasville in Georgia, Florida. Colorado, for some cases, is an excellent climate. Cases having a co-existing bronchitis do better in a damp and mild climate, as Florida, etc. The element of change is very useful. The Adirondacks is a fine place for those early cases in which there is no tendency to hemorrhage. Prof. Da Costa does not care much for the "milk diet," but allows it in conjunction with other things. Gives plenty of meats and alcohol in moderation, especially in those cases free from fever. Mix it with ol. morrhuæ, and lessen the tendency to its abuse. Whiskey and brandy are the best stimulants here. You need not interdict smoking.

Medicines.—Ol. morrhuæ is of great utility by improving nutrition and also by affecting the tubercle. Do not use its substitutes, as glycerine, etc. Give f℥ss, ter die, one hour after meals. To disguise it, and to promote its ready absorption, give m x-xv ether. but this sometimes causes belching. Mix it with equal amount of malt or whisky. When the appetite fails stop its use for a while. Do not permit the oil to be taken in hot weather.

Next in importance is arsenic in small doses in the early stages; arsenious acid, gr. $\frac{1}{10}$ or gtt. iij Fowler's solution, ter die. In the late stages it will be of no avail.

A third remedy is iodine; it should be more generally used; liq. iodi comp, gtt. i-iij, ter die, with potassium iodide to alternate with it. When anæmia is present, *and not much fever*, use iodide of iron. It is very valuable. Push it up to the point of tolerance. Begin with gtt. xv of the official syrup, and push up to f℥j, ter die.

Prof. Da Costa does not like the hypophosphites. They have no special effect, as ol. morrhuæ and arsenic. Inhalations of sodium benzoate are of no use. Carbolic acid and tar by inhalation are of some avail.

Treatment of Special Symptoms—Entirely too much is done for the symptoms. For cough we should give no expectorant unless bronchitis exists. Since the cough is generally an irritative one, morphia must, in time, be given. Codeia, gr. $\frac{1}{6}$—$\frac{1}{4}$, in simple elixir, often has a wonderful effect and does not constipate. Prussic acid or fluid extract of wild cherry is very useful at times. We may combine the acid with morphia. Inhalations of oil of eucalyptus give relief.

Night Sweats—Give atropia, gr $\frac{1}{60}$, at bed-time, Sponge off the body with hot water to constringe the vessels. Infusion of sage at night. Mineral acids, especially sulphuric acid. Zinc oxide, gr. ij, ter die. Ergotin or fluid extract of ergot is better than morphia in some respects. It is more permanent and does not cause dryness. Give ergotin, gr. ij, ter die, the last dose at bed-time.

Digestive System.—The patient often has vomiting. Two excellent remedies may be given, as carbolic acid or creasote, gr. $\frac{1}{4}$, four times per diem. Strychnia, gr. $\frac{1}{60}$, ter die, is also of great value.

Diarrhœa,—Opium, bismuth, ℈j; copper sulphate, gr. $\frac{1}{12}$; silver nitrate, gr. $\frac{1}{4}$, etc.

The Throat in Phthisis.—It may be swollen, and the larynx the seat of ulcers, which may become tubercular. Drink demulcents, as Irish moss (ʒj to Oj).

Prof. Da Costa has confidence in local applications of iodoform and cocaine. Let the patient eat his meals while the parts are under the effect of cocaine.

For *Irritative fever.*—

℞. Quininæ sulph.,.....gr.iss.
Digitalis,.....gr.ss
Opii,.....gr. $\frac{1}{4}$. M.
Ft. pil.
Sig.—Ter die.

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL APRIL, 1886.

FIFTEENTH ANNUAL CONVOCATION OF THE MEDICAL FACULTY OF BISHOP'S COLLEGE.

This Convocation for conferring degrees in Medicine was held in the Synod Hall, Montreal, on the 13th of April. There was a large attendance of the friends of the College to witness the proceedings, the ladies, as usual, being present in full force. Owing to the unavoidable absence of

the Chancellor the meeting was presided over by the Vice-Chancellor, the Rev. Dr. Norman. There was also on the platform the Dean of the Medical Faculty, Dr. F. W. Campbell, and the Registrar, Dr. Kennedy. The secretary of the University, Mr. Chapman, also assisted. There was also present the members of the Medical Faculty and other members of Convocation.

The Vice-Chancellor in some well-chosen and apposite remarks referred to the unavoidable absence of the Chancellor, and paid him a deserved tribute for his devotion to education and his great interest in and love for Bishop's College. The number of students the past session was two in excess of last year. Twelve years ago many French Canadian students had taken courses in the College, but these had entirely fallen off for various reasons, and these now attended colleges of their own religion. Ten years ago a large proportion of the graduates went to the United States, but of late years many remained in Canada and practised with much success. In this city four are practising with honor and profit to themselves and to the College. The scope of the College is enlarging yearly, though it has had many financial difficulties to contend with, amongst others the large rent paid for the present buildings. It is to be hoped that the Faculty will soon be enabled to become proprietors. Three of the Professors visit Europe this season for the purpose of special researches in study. In the Eastern Townships twelve of the graduates are settled. Last May the Dean of this College was put on the staff of the Montreal General Hospital. The Vice-Chancellor also spoke of affiliations made with other colleges and schools of learning. He also mentioned the fact that he thought the cause of education would be enhanced if a central university in connection with the Anglican Church were established, or, if too many difficulties presented themselves, it might be confined to a central board of examiners. He had the pleasure to announce that the Rev. Thos. Adams, the new Principal of Bishop's College, was using his best efforts to build a wing to the College, to be entitled the Bishop Williams' wing, in which it was contemplated to have a chemical laboratory. The sum of five thousand dollars was required, of which twenty-seven hundred had already been promised. He could, therefore, state that the prospects of the College were most encouraging. A deserved tribute was paid to the late Principal of the College, and also to the present one. Mrs. Davis had made the College her residuary legatee, and had also given a direct bequest of $8,000, and her sister, Miss Davidson, had also given the latter sum, making a total of $16,000. He spoke of the ability and zeal of the Professors, and concluded an eloquent address with a peroration upon the advantages of general study when following up a certain branch.

Dean Campbell then read the following report: The number of matriculated students was twenty-five; three from the West Indies, seven from Montreal, one from Ontario, and the balance from the Province of Quebec.

Botany—C. E. Vidal, 1st class honors and prize; L. M. Clark, T. S. Nichol.

Practical Anatomy—F. H. Pickel, senior prize; C. E. Vidal, junior prize.

Materia Medica and Therapeutics—W. E. Fairfield, F. H. Pickel, A. S. Thomas, J. M. Rohlehr.

Anatomy—F. H. Pickle, A. E. Phelan, A. S. Thomas.

Physiology— F. H. Pickel.

Chemistry—F. H. Pickel.

Hygiene—A. E. Phelan, F. H. Pickel.

Practical Chemistry—F. H. Pickel.

Primary Examination—W. E. Fairfield, Clarenceville, Que., 1st class honors and David Scholarship; A. E. Phelan and F. H. Pickel, 1st class honors; A. S. Thomas, 2nd class honors.

Medical Jurisprudence—R. Campbell, W. E. Fairfield, A. E. Phelan, A. P. Scott, A. S. Thomas, J. M. Rohlehr.

Pathology—W. E. Fairfield, R. Campbell, A. E. Phelan, A. P. Scott, V. I. Groulx, S. A. Thomas.

The following passed the final examinations, comprising Practice of Medicine, Surgery, Obstetrics, Gynecology, Medical Jurisprudence, Pathology, Clinical Medicine and Clinical Surgery:

Albert E. Longeway, of Dunham, P. Q., first-class honors and "Wood" gold medal.

Edward O'Brien Freligh, Montreal.

Angus O. Patton, Caughnawaga.

W. G. Nichol, Montreal.

Dr. A. E. Longeway also won the Nelson gold medal, having taken very high marks in the special examination on Surgery.

Wood gold medal and "Nelson" gold medal—Albert Ernest Longeway, Dunham, P.Q.

David Scholarship, for the best examination in the primary branches—W. E. Fairfield, Clarenceville, P. Q.

Botany prize—C. E. Vidal, St. Johns, P. Q.

Senior Anatomy prize—F. H. Pickel, Sweetsburg, P. Q.

Junior Anatomy prize—C. E. Vidal, St. Johns, P. Q.

The following gentlemen received honorable mention, having won first-class honors in the primary branche : A. E. Phelan, F. H. Pickel.

The medical oath was then administered by the Registrar, Dr. Kennedy, to the four gentlemen who had passed the final examinations, they also affirming their allegiance as British subjects, the National Anthem was afterwards sung by all present. The Dean next presented the candidates for the degree of C. M., M.D., which was conferred upon them by the Vice-Chancellor.

The medals and other prizes were then given. The *ad eundem* degree of M. D. being conferred upon Dr. Rowell, Professor of Anatomy. The valedictory, an interesting and able one, was delivered by Dr. Saunders, a recent graduate of the College. This will be found elsewhere in our columns. After additional remarks by the Vice-Chancellor, the meeting was dismissed by benediction.

THE BLOOD-PLAQUE.

We have read with pleasure one of the Cartwright Lectures, recently delivered before the Association of the Alumni of the College of Physicians and Surgeons, New York, by our esteemed friend Dr. Osler, on Blood-plaque.

The third corpuscle or blood-plaque is colorless disks of protoplasm measuring 1·5 to 3·5 micro-millimetres. Various terms have been used by writers to indicate this body, for example : *elementary corpuscles*—Zimmermann ; *granular debris* or Schultz's *granule masses ; hæmatoplast*, Hazen's ; *blutplattchen, blood-plate* by Bizzozero. The term *plaque* has lately been given to this body by Kemp of John Hopkin's University. They probably exist in the blood of all mammals. In man in a state of health they are found in the proportion of 1 to 18 or 20 red corpuscles, or 35 or 40 to 1 white corpuscle. There are from 200,000 to 300,000 per cubic millimetre.

They may be well seen in the thin, transparent vessels of the omentum of a white rat, if the current is slow. When removed from the blood-vessels they rapidly change and disintegrate, but may be examined and preserved by receiving the blood into a solution of ½ to 1 per cent. of osmic acid or into Pacini's solution. Like all protoplasmic bodies they may be stained with the aniline dyes.

They are circular desks, and probably flat although they sometimes seem to alter a little in form, and closely resemble a biconcave disk. In the recent state they present no nucleus, but after the addition of preserving fluids there appear a collection of granules having very much the appearance of a nucleus, and which in dried preparations take a deeper stain in the hæmatoxylon than the remainder of the plaque, and is regarded by Hazen as a nucleus.

They seem to be most numerous in weakened, debilitated conditions of the system. In acute diseases they are not more numerous at first, but increase in numbers, during the 2nd, 3rd and 4th weeks. This is true of typhoid fever. In the 3rd and 4th weeks of this exhausting fever they may be found in great numbers. Patients debilitated by cancers, tubercle, etc., have them in marked excess. In blood diseases they are variable. Dr. Osler states that he has found them in extraordinary numbers in Hodgkins' disease, while in some cases of pernicious anæmia they may be absent or scanty.

Different views are held as to their origin, many believing them to be the debris resulting from the disintegration of leucocytes, but Dr. Osler, from his observations of the plaques in the newly-born rat, thinks this theory of their origin untenable. There is said to be no evidence that they result from the degeneration of the red corpuscles. Many believe them to be independent elements in the blood, and others agree with Hazen that they are young red corpuscles.

PERSONAL.

The death of Professor Fehling, at Stuttgart, is announced. The re-agent for testing the presence of sugar in urine bears his name. He had attained the age of seventy-five.

Dr. George E. Fenwick, of Montreal, has been elected an Honorary Member of the New York State Medical Society.

REVIEWS.

Minor Surgical Gynecology by PAUL F. MUNDÉ, M.D. New York., Wm. Wood & Co., 1885.

Even in these days of uterine specialism when the average Medical Journal is crowded with notices of books having reference to Gynecological

placing any work by such a well known author is welcome. It will be remembered that in the issues of 1880 Woods Library contained a work by Professor Mundé covering part of the ground occupied by "Surgical Gynæcology."

The book before us comprises the manual in the Library and a great deal more. We believe it to be the best handbook of the kind that has yet appeared, and the second revised edition is a very great improvement upon the first, which appeared nearly six years ago. We only wish we could make ourselves believe that the good results ensured to result from the use of pessaries, even when applied with the care prescribed by Mundé, are unattainable in practice, but we confess to considerable scepticism on that score. The system of rules for their use (page 307) are admirably laid down, and doubtless if they are adhered to will much reduce the number of pessaries employed very considerably lessen the dangers and inconvenience arising from their use.

The Pedigree of Disease. Being six lectures on Temperament, Idiosyncrasy and Diatheses. Delivered in the Theatre of the Royal College of Surgeons in the Session of 1882. By Jonathan Hutchinson, F.R.S., late Professor of Surgery and Pathology in the College, Emeritus Professor of Surgery in the London Hospital; President of the Opthalmological Society, etc., etc. New York: William Wood & Co., 56 and 58 Lafayette Place. 1885.

These lectures, dealing with fundamental principle, are of great interest to all practitioners of medicine, as in fact anything written by Jonathan Hutchinson is sure to be. Good reasons are given to show that "temperament," upon which our forefathers laid so much stress, is the result of the combined effect of race, and disease, personal or inherited. The domain of *Idiosyncrasy* is shown to be very large, and a correct knowledge of the idiosyncrasy of our patients exceedingly helpful in their guidance and treatment. The author speaks of three (3) great universal diatheses viz.: catarrhal, rheumatic and the scrofulous. Of parallel but of minor importance, are the diatheses of senile degeneration, of malignant new growths and of rickets, bronchocele, scurvy, leprosy, pellapa, and gout. The hæmorrhagic diathesis is thought by the author to be due to gout in some of the patient's progenitors.

The work is remarkably suggestive, full of interest, and by one in a position to speak with authority. We cannot recommend it to our readers too highly.

A Practical Treatise on Nasal Catarrh and Allied Diseases. By Beverly Robinson, A.M., M.D., (Paris) Clinical Professor of Medicine at the Bellevue Hospital Medical College, New York; Physician to St. Luke and Charity Hospitals, etc., etc. Second Edition, revised and enlarged, with one hundred and fifty-two wood engravings. New York: William Wood & Co.

This is a comprehensive treatise on the subject indicated by the title. The style is clear, and the numerous illustrations of instruments and their mode of application is such as to give to the student or young practitioner a clear idea of the way he should handle them in the treatment of the nasal and naso-pharyngeal spaces. The treatment is rather empirical, and undue prominence given to set forms of prescriptions, instead of demonstrating the pathological condition present, and the therapeutic indications. The work is a safe guide to work with.

Hay Fever, and its Successful Treatment by Superficial Organic Alteration of the Nasal Mucous Membrane. By CHARLES E. SAYOUS, M.D., Instructor in Laryngology, and Rhinology in the Post Graduate Course, Jefferson Medical College. Philadelphia: F. A. Davis, attorney, publisher. 1885.

This small volume gives a history of this affection, but the principal object of its publication is to draw the attention of the profession to the author's belief that a local condition of the nasal mucous membrane is an essential factor in the production of an attack of hay fever. Moreover that as long as this local condition is overlooked, all efforts to conquer the disease will be fruitless. The author takes as the basis of his proposition an extract from an article on "Nasal Cough" by Dr. MacKenzie of Baltimore, which appeared in the *American Journal of Medical Science* for July, 1883, which says, "there exists in the nose a well-defined sensitive area, whose stimulation through a local pathological process or through *ab extra* irritation is capable of producing an excitation which finds its expression in a reflex act." He finds this area at the posterior end of the inferior turbinated bones and the corresponding portions of the septum. Dr. Hark, a German

author, locates another such spot at the anterior extremity of the inferior turbinated bone, while the writer of this volume describes a third sensitive area which he has found in the anterior portion of the nasal cavity forming the anterior boundary of the vestibule and located upon the nasal wall, as well as on the septum. He proposes to destroy their extreme sensitiveness by means of either nitric, chromic, or glacial acetic acids, and he records some markedly successful cures. The work is well worthy of perusal.

The Field and Limitation of the Operative Surgery of the Brain. By JOHN B. ROBERTS, M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic. Price $1.25. Philadelphia: P. Blakiston, Son & Co., 1885; Montreal: Dawson Bros.

This is an essay read last year at the meeting of the American Surgical Association, and its subject is one of the most profound interest to all who practice the surgical art. Undoubtedly the author is not alone in the view which he holds, that life is often sacrificed to the do-nothing treatment of many surgical brain affections. We trust his book will receive the candid consideration it deserves. If it does we believe only good can follow its publication.

Essentials of Vaccination A Compilation of Facts relative to Vaccine Inoculation and its Influence on the Prevention of Small-pox. By W. A. HARDAWAY, M.D., St. Louis. J. H. Chambers, publisher, 1886.

A very excellent book, and full of facts of a very telling character in favor of the protective power of vaccination. We hope it will have a large sale. If we had our way we would have our Local Government present a copy to the many lukewarm supporters of vaccination in the Province of Quebec. If their reason is capable of appreciating facts their conversion might follow and then—well—the millenium.

Berlin, as a Medical Center: A Guide for American Practitioners and Students. By HORATIO R. BIGELOW, M.D., Sandy Hook, Connecticut, New England Publishing Co., 1885.

This little *brochure* appeared last year in the *New England Monthly*, and contains a great deal of information of a character to be very valuable to all who intend to prosecute medical study in that great centre—Berlin. Any one intending to go there should obtain it.

A Guide to the Practical Examination of the Urine. By JAMES TYSON, M.D. Fifth edition, revised and corrected, with colored plates, and wood engravings. Philadelphia: P. Blakiston, Son & Co., 1886; Montreal: Dawson Bros.

As each edition of this little book has made its appearance we have expressed the high opinion we entertain of its value. We can only do so again. It is without doubt a volume which should be in the possession of every student of medicine and every practitioner. We have used it almost daily for several years, and would not be without it for ten times its value. The present edition is well up to the times.

LOCAL AND GENERAL.

What wonderful effects are claimed for remedies? In looking through medical journals one feels inclined to ask himself by what mental process reporters of semi-miraculous cures arrive at their conclusions. If one-half the effect claimed for drugs were really obtainable what a paradise would be this mundane sphere! Here is a sample: Dr. B. F. Nicholls, writing in a recent number of the *Philadelphia Medical Times*, says that he considers fluid extract of hamamelis in teaspoonful doses "almost a specific in varicose veins from almost any cause," and in support of this extraordinary statement he quotes from cases in practice where the drug had been used with apparent success. I have not tried hamamelis in varix of the lower limbs, but I would suggest that Dr. Nicholls might have given the bandaging, compresses and rest some of the credit for the satisfactory results in the cases brought forward by him.

At last we are to have a Bill introduced into our Local Legislature which will, *inter alia*, deal with the question of the registration of births and deaths. Indirectly this is one of the results of our late small-pox epidemic, and is an apt illustration of the proverb which refers to "ill winds" of that kind. Registration will enable us to deal thoroughly with vaccination and with anti-vaccination. The opponents of the compulsory clause as regards vaccination should be gently dealt with. The mental obliquity that afflicts the leaders of this re-

trograde movement should be treated as one would treat other forms of aberration of intellect—not by the straight jacket, but by judicious firmness. If the compulsory regulation were not to go into effect until three years had gone by I am certain the opposition will by that time have melted away. In the meantime the practice of it can be continually and steadfastly and intelligently pushed, and the people will soon find how very little truth there is in the dreadful stories claimed by the anti-vaccinationists as true.

Speaking of mental troubles reminds me of Sutherland's article on insanity (*British Medical Journal* for January 30th) and it is to be remarked regarding it that very many valuable observations are there crowded into small space. He speaks chiefly of the premonitory symptoms of insanity and devotes some space to their treatment. Esquirol's three stages of insanity are cleverly referred to the different classes of persons with whom the unfortunate comes in contact during the progress of his disease. The first stage (change of habits) is usually observed only by the relatives of the patient; in the second (perversion of the affections) the family physician is added to the list of observers; while in the last stage (that of true insanity) the asylum superintendent takes the patient in hand. Unless patients have suffered from a previous attack it is almost impossible to guess during the first stages what form the insanity will assume.

Unless the result of alcohol drinking, following injury, or from sunstroke (when an attack of mania may be the first sign of the trouble) the disease rarely begins with excitement. Indeed the majority of cases are usually preceded by a depression period, the *stadium melancholicum* of Guislain.

Change of habits! that is the characteristic symptom. *Alienus*, the man acts as if he were some other man and not the rational creature we once knew him to be. He is extravagant, suspicious, and jealous, when he used to be careful, open and confiding. He loses his memory, neglects his dress, becomes depressed, and gets "eccentric." The style of conversation is changed, oaths and obscene language are uttered by those who were previously unknown to be guilty of such conduct. Sexual appetite varies, but, strangely enough, it is in excess in general paralysis and in senile dementia. The maid servant, says the lecturer, is frequently found to be pregnant by the master before any mental aberration is discovered by the relations. This sounds like an irreverent statement, but it is not to be forgotten in the diagnosis and prognosis of insanity.

This is the free-and-easy way in which some correspondents write to and editors publish letters in Western Medical periodicals. The Texas *Courier Record* contains the following description of dengue "by one who has had it:"

Dengue is a viviparous, homogeneous, amphibious hermaphrodite from the head of "bitter creek," close to "wild cat run." It is indigenous in Austin and spontaneous in Dallas—among hogs, dogs, cats, and other non-office seekers. It is contra-indicated in all cases where a fellow expect to engage in a prize fight or make a "crap." It is bilateral, having an inside and an outside. It has no symptoms—it strikes a fellow on his way from church or in a saloon, and paralyzes him to the end of his hair, and then feels out for "other worlds to conquer." Its pathology is confined mostly to the whole body, skin and mouth. It destroys a man's pugnacity and plants instead thereof humility and a third-class case of rheumatic-gout-small-pox-fits-inflew-endways and chloroformmorbus Those who have not had their pegs knocked from under them by this fiendish short-rib searcher say they think they have "had a touch of it." To all such we wish to say:—wait till it "touches" you up in earnest, and then you will say in the words of Horace Greeley, "I have *wilted*."

The Cartwright Lectures were delivered by Dr. Osler before the Alumni Association of the New York College of Physicians and Surgeons. The subject, "Certain Problems in the Physiology of the Blood," was treated of in three lectures, and the course has been spoken of in a way which should make every Canadian feel proud. The Philadelphia *Medical News* and New York *Medical Record* both contain the lectures *in extenso*, and every one should read them.

Here is an odd contribution to the study of biology in the Journal of the State Board of Health for Tennessee. Dr. D. F. Wright describes a condition in eggs which he claims is a true inflammation thereof:—"There is a condition of the egg, very little known, which considerably impairs its sanitary value as an article of food. Soon after it became the practice to transport eggs in large quantities and to long distances by railway trains

it was found on their arrival that adhesion had taken place between the membranes of the yolk and those of the shell, so that the yolk could not be turned out of the shell unbroken. On examination by experienced pathologist this was found to be the result of true inflammation; the material of the adhesion was found to be precisely the same as that of the plastic exudation in inflammation of the lungs or bowels. It will at first seem absurd to speak of inflammation in such an unformed mass as an egg; but this arises from our forgetting, that, structureless and unorganized as it seems, the egg, even when fresh laid, is a living being, and capable of disease from external causes. The cause of this inflammation is undoubtedly the shaking and friction from the motion of the cars, and it cannot but render the egg more or less unhealthy, as the products of inflammation can never be as salutary in food as those of healthy growth.

Yes, the egg may contain the "promise and potency of life," but not those vital conditions without which we cannot have a true inflammatory state. The new-laid egg is *not* a living being until certain changes have occurred in it—until the necessary blood channels and until the nerve fibres to regulate the flow of the blood in them have been formed. When the formative process has been sufficiently advanced to permit of the definite process called inflammation then, and only then, can we have the inflammatory exudation which Dr. Wright speaks of. Springs, wheels, dial, hands, etc., are not a clock, neither is an egg the most diminutive kind of chicken.

A good deal of journal space is still devoted to thallin and antipyrin. A good account of the supposed anti-pyretic properties of thallin is given by Dr. Crozer Griffith (Dr. Osler's assistant) in a recent number of the Philadelphia *Medical News*.

Thallin has nothing to do with the metal thallium, altough they both derive their name from the same Greek root. Its chemical formula is $C_{10} H_{13} NO$, its formal name is hydrate of parachinanisol or, if you prefer, you may call it tetrahydroparamethyloxyquinolin. It is a pale yellow or white powder with an agreeable, aromatic odor, said to resemble that of the trailing arbutus. The taste, however, is bitter, pungent and disagreeable. It is easily soluble in water, with difficulty in alcohol, and insoluble in ether. The first to use it was Von Jaksch in Nothnagel's clinic. He concludes that thallin is very similar in its action to antipyrin, although in much smaller doses, but claims that it is more rapid in its action, although the fall of temperature produced lasts for a shorter time. It is also less dangerous, inasmuch as it never causes collapse, as does the latter drug. Both agents may produce profuse sweating; and chilliness or rigors often occur with the subsequent rise of the temperature after the action of the medicines has ceased.

These conclusions he reached by giving thirty cases of various diseases, accompanied by fever, alternating doses of antipyrin and thallin. His investigations, throughout, were most careful and thorough. The usual dose of thallin as administered by him is four to fifteen grains, given at one time, and repeated in one or two hours if no effect is produced. The degree of reduction of temperature obtained varies somewhat, and the duration of the lowered temperature lasts usually but a few hours.

Dr. Griffith concludes from clinical experiments that thallin is efficacious in reducing temperature in most cases of fever but frequently decided depressions of strength occur (with profuse diaphoresis) during its administration and it must be given with great care to debilitated patients. The cost of the drug is about three dollars an ounce laid down in Montreal.

The Contagious Diseases Acts, by which prostitution was regulated in certain British military stations has been repealed by the rather large majority of 114 in the House of Commons. There has been persistent opposition to these legislative enactments ever since their passage in 1875. Whether they accomplished the good claimed for them (the repression of vice and the prevention of venereal diseases) is a much-disputed question, but the English people chafe under the restrictions which on the continent have been in force for so many years in the large cities. Now that the opponents of the regulative plan have carried the day what do they propose to put into its place, or do they abandon the attempt to limit the spread of syphilis and gonorrhœa, as is done in this and other favored localities?

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Original Communications.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital February 23rd 1886.

BY FRANCIS W. CAMPBELL, A.M., M.D., L.R.C.P. L.

(Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

ECZEMA.

GENTLEMEN,—The woman now before you came to the Out-door Clinic yesterday, complaining of the rash on the back of her neck, which I now show you. She has had it for some time, and its irritation has been the source of much annoyance to her. The disease is eczema, which may be acute or chronic, and has several sub-divisions, —usually four: 1. Eczema Erythematosum. 2. Eczema Vesiculosum. 3. Eczema Papulosum. 4. Eczema Pustulosum. The case now before you is of the first variety, viz., Eczema Erythematosum. It is a distinct inflammation of the skin, characterized by a somewhat inflammatory surface—some infiltration, swelling and itching, and terminating in desquamation or shedding of the skin. It is perhaps the most common variety which we meet with, and has a strong tendency to become chronic. Slight moisture is, upon rare occasions present, but as a rule the disease remains dry throughout. The disease is curable, and the means used must be both constitutional and local. In cases of not very long duration saline aperients, as sulphate of magnesia, cream of tartar and Rochelle salts, should be given. When the disease occurs in childrenr, hubarb is especially recommended. Diuretics are also advised, as acetate of potash and liq. potassæ. Various mineral waters, as the Saratoga, Vichy and Carlsbad, are beneficial. In worn-out, debilitated subjects, iron, quinine, and cod liver oil, are very valuable. Arsenic should be given in very small doses —ii. gtt. three times a day after meals. Local treatment must always be followed. In the variety now before you the following lotion will be prescribed, and I believe will act beneficially:

R. Acid carbolic, ʒ ss; glycerinæ gtt. xv; alcoholis, ʒ i; aquæ, ℥ iv. M. ft. lotio. Apply several times a day by means of a small sponge.

This patient, gentlemen, possesses a double interest to us, inasmuch as while coming to get relief for one disease our attention is attracted to a second disease from which she is suffering. Although the disease is considered a surgical one it is rarely bad enough to fall into the hands of an operating surgeon. Most generally the physician is called upon to treat it, and for this reason I draw your attention to it. As she bares her neck you will notice a distinct swelling over the front of the throat—that is over the situation of the thyroid gland. This disease is known as goitre or bronchocele, and is much more common in women than in men. In fact during all my experience I can only recall two or three cases in males, while I have seen many hundreds in females. The cause is thought to have some connection with the locality in which the patients live. It is said that low, moist situations favor it, while high, airy places are extempt. In this city it was very common some years ago, and is still often met with on the flat which commences where this hospital stands, and which ends at the foot of the hill—which terminates at Sherbrooke street. It was believed to have been

caused by drinking well-water which was largely impregnated with lime; and its comparative rarity now is said to be due to the fact that in very few places do wells now exist, so that the water-supply is almost entirely obtained from the river. It is met with in animals. Its size varies from a walnut to an adult head—the first is not troublesome, the latter serious, from its interference with respiration, and will most likely demand surgical interference. The gland has two lobes, both are generally affected, but not equally. It is not painful, and the general health is not impaired. As a rule, the enlargement is slow—but I have known it to increase in size very rapidly.

The treatment of goitre is unsatisfactory, except when the tumor is so large as to interfere with respiration and removal is demanded. If the patient survive the result is most satisfactory. The medical treatment is the application of iodine paint, the use of leaches, blisters and purgatives. I prefer to use the compound iodine ointment instead of the tincture. The latter blisters speedily, so as to necessitate its discontinuance, the ointment does not. You may give iodine internally, also iodide of potash, and some advise the protoiodide of mercury, to the extent of slight salvation. In India the biniodide of mercury ointment is used as a local application, the patient subsequently exposing the neck for a considerable time to the rays of the sun. It has been tried here and with a certain measure of success. Ergotine internally and the hypodermic injection of ergotine into the tumor is spoken of by several writers as acting well. As the patient does not give any heed to the affection I will not waste medicine by attempting treatment. As she came for the skin disease I have taken advantage of saying a word or two upon the other.

NEURALGIA OF THE FIFTH PAIR OF NERVES.

The patient now before you has been twice at the Out-door Clinic. She is 23 years of age, and not by any means of a robust constitution, in fact, I question much, from her development, if she has ever since attaining womanhood enjoyed what is known as "robust health;" she has been suffering for some time from a feeling of debility, a disinclination to attend to any work, with shooting pains over various portions of her head, which within a few days have largely centred over that portion of the face and head which is supplied by the ophthalmic division of the fifth nerve, viz., the side of the nose, the eyelids, the lachrymal gland, the globe of the eye, the conjunctiva, the forehead and the scalp. The most severe spot in this case is at the supra-orbital foramen, where the nerve passes out to ramify on the forehead and scalp; and the paroxysms of pain are paroxysmal and of a sharp, lancinating character. Any mental or physical exertion increases the pain, which not unfrequently causes nausea and vomiting. We do not often meet with this affection before the period of puberty is reached, and it occurs most often in females There is unquestionably very often a transmitted hereditary influence. Neuralgia is very common in marshy districts, due to malaria. In women it often follows the exhaustion which ensues from prolonged lactation, also from menorrhagia or profuse menstruation. Mental anxiety and exposure to cold are also causes. Cases which may be improving under treatment often relapse from a careless exposure to a damp, cold wind.

The treatment is constitutional and local. If the disease is believed to be of malarial origin, quinine in doses of gr. ii. every four or six hours is the appropriate remedy, arsenic, Fowler's solution, (liquor arsenalis) in doses of four drops, twice a day, after meals, largely diluted. If it does not yield you may increase the dose gradually to eight drops. The arsenic may be injected hypodermically. This method is strongly advised by Dr. Hammond of New York. General tonics, as cod liver oil, iron and strychnia, are beneficial; ergot is also a valuable remedy. The pain is sometimes so unbearable that the following combination, prepared by John Wyeth & Brothers will be found, under such circumstances, of decided advantage: ℞ Quinine sulph. gr. 1½; morphia mur., gr. 1-20.; strychnia, 1-30; ext. aconite, gr. ¼ in a pill. The well-known physician, Dr. Brown-Sequard, has recommended the following pill, which I have often used with advantage: R. ext. hyosciami 2-3 gr.; ext. conii 2-3 gr.; ext. ignat. amar. ½ gr.; ext opii. ½ gr.; ext. aconite 1-3 gr.; ext canab. ind., ¼ gr.; ext stramon, 1-5 gr.; ext belladonnæ, 1-6 grain. If you do not think it necessary to give opii, which you will notice is in the above combination, you may use the following: ℞ Quin. S. gr. ii. strychnine, 1-30 gr.; acid arsenius, 1-20 gr.; ext. aconite, ½ gr., or the same with the addition of ¼ gr. of morph. sulph. The diet must be full, generous and nutritious, the sun bath and pure fresh air.

The local treatment consists of anodyne liniments, composed of tincture of opium, chloroform and tincture of aconite or of tincture of veratria, the application of blisters along the course of the

nerve. The latest local application is the application of the menthol pencil. Electricity is rapidly assuming an important place in the therapeutics of this disease; the best form is that of the primary galvanic current, which should be applied for at least thirty minutes, and should be repeated daily for several weeks. Sometimes the pain is so severe that the hypodermic injection of solution of morphia or, of Batley's sedative solution is demanded. It should if possible, be injected along the course of the affected nerve. This patient I have placed on two grains of quinine 3 times a day, and given her iron, in the form of the saccharated carbonate of iron, which is one of the ferruginous preparations which is easily assimilated.

Progress of Science.

TREATMENT OF ACUTE INFANTILE BRONCHITIS.*

By J. Lewis Smith, M.D.,

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Infantile bronchitis is probably the most frequent disease which the physician is called upon to treat. It is usually mild and readily controlled by proper remedies, but in other instances, especially when neglected or improperly treated, it becomes by extension downward to the minute bronchial tubes, or to them and the alveoli, one of the most fatal maladies of infancy. It is, therefore, very important that bronchitis in the infant receive timely and proper treatment.

A brief glance at the clinical history of this malady will help to a correct knowledge of its therapeutic requirements. Acute bronchitis is in most instances preceded, and in its first stages accompanied, by coryza, which first arrests the attention of the parents, but within a day or two the inflammation extends to the larger bronchial tubes, and is announced by a cough. The bronchitis is often limited to these tubes throughout the attack, under which circumstances it is so mild that treatment is scarcely required, but between this mild disease and that severe form in which the minute bronchial tubes are involved, there is every grade of severity.

Bronchitis in the infant is primary or secondary. Two diseases are always accompanied by it, in a form so severe that the cough which it causes is a prominent symptom in each, to wit, measles and pertussis. It occurs also in a mild form in typhoid fever, and is present in tuberculosis, and in many cases of diphtheria. It requires, in a measure, different remedies according to the conditions in which it occurs, but the treatment may be most conveniently considered under the two headings of mild and severe bronchitis.

Bronchitis can probably be aborted or rendered milder in some instances by an emetic employed when the first symptoms appear. Its effect is more certain if the patient drink warm water at the same time, and take a warm foot bath or general bath. The syrup of ipecacuanha is perhaps the best medicine for this purpose. It promotes bronchial secretion and diminishes the force of the circulation. But ordinarily the physician is not summoned until the bronchitis is established, and measures designed to abort it are inadequate.

Treatment of mild Bronchitis. The inflammation is limited to the larger tubes, or to these and those of medium size; if to the larger tubes, it gives little inconvenience, and often passes off without treatment. The patient is said to have a cold. In mild bronchitis, the respiration is but slightly accelerated, the temperature not above 102°, the cough not painful, or attended by a slight degree of soreness in the upper sternal region; the thirst is moderate, and the appetite not notably diminished.

In this form of bronchitis, in which there is no increase of symptoms from day to day, demulcent and mild expectorant medicines are sufficient to cure the disease. Even domestic remedies are sufficient. It is of such cases that the late Dr. James Jackson, of Boston, in his advice to a young physician, wrote as follows; "For young children I employ the following: Take of either almond or olive oil, of syrup of squills of any agreeable syrup and of mucilage of gum-acacia, equal parts, and mix them. Of this mixture, a teaspoonful may be given to a child two years of age, a little less, if younger, and increase if older, so as to double the dose to one in the sixth year."

Of the mixtures officinal in our pharmacopœia, the mistura glycyrrhizæ composita is perhaps the best for mild bronchitis, and it is largely used. It is beneficial not only in the primary disease, but in the secondary or symptomatic bronchitis of measles and pertussis. The small amount of tartrate of antimony and potassium which it contains, $\frac{1}{64}$grain to the drachm, has a slight sedative effect on the action of the heart without causing nausea, and it promotes expectoration. The paregoric in this mixture being one part to eight, is useful if the infant be restless, and deprived of the needed sleep. A patient of one year can take one-third of a teaspoonful, and one of two years half a teaspoonful, every two to four hours. The syrupus ipecacuanhæ compositus of the French pharmacopœia is also one of the most beneficial remedies for mild bronchitis. It is slightly laxative, and it produces no narcotic effect. It consists of the ipecacuanha and senega roots, thyme, the blossoms of the red poppy, which I believe are not narcotic, orange-flower water, white wine, sugar and a small amount of sulphate of magnesium. An infant of eight months can take half a tea-

* Read before the Section of Obstetrics and Diseases of Children, New York Academy of Medicine, January 28, 1886.

spoonful every second hour, and one of eighteen months or two years one teaspoonful every second or third hour. I have prescribed this syrup during the last two years, and mothers who have observed its effects have commended it. As is seen from its composition, it promotes expectoration without any of the ill effects which sometimes result from the use of those mixtures which contain opiates. If it were introduced into our pharmacopœia it would probably be largely used in this country.

If the temperature rise to 102° or above with the respiration in a corresponding degree accelerated the cough painful, and the pulse frequent and strong, indicating extension downward of the inflammation, the following prescription I have found useful:

℞.—Spts. ætheris nitrosi,

Syrupi ipecacuanhæ	aa	ʒ ij
Ol. ricini		ʒ ii
Syr. bal. tolut		ʒ j.—M.

Sig. Shake bottle, and give half a teaspoonful to an infant of one year; one teaspoonful to an infant of two years.

Mild bronchitis, with the use of such remedies as have been mentioned and with the external treatment of the chest which will be described hereafter, gradually abates in most instances. But the physician should be prepared for the other alternative, namely, an increase in the severity of the symptoms by extension of the inflammation to the smaller tubes, and the change of a mild into a severe bronchitis.

Severe or grave Bronchitis. The inflammation has extended to the minute bronchial tubes: the mucous membrane of these tubes is hyperæmic and swollen, and actively secreting. On account of the small size of the tubes, many of them become occluded by muco-pus, which acts as a ball-valve, allowing the escape of air upward from the alveoli, but preventing its entrance into them. Hence the alveoli connecting with these closed bronchioles become less and less distended with air, undergoing partial collapse, and some of them pass into a state of complete atelectasis. This occurs most frequently in the posterior and depending portions of the lungs.

Another equally serious pulmonary complication often occurs. I refer to catarrhal pneumonia. The inflammation in its progress downward in the most severe forms of the disease passes from the bronchioles to the adjacent alveoli, usually in more places than one. With the occurrence of this complication, the symptoms are aggravated, the suffering increased, and the prognosis is obviously the more unfavorable the greater the extent of this complication. Broncho-pneumonia thus occurring is indeed one of the most dangerous diseases of infancy, and one that requires the utmost vigilance on the part of the physician, and the most skilful use of remedies, to save the life of the patient. The respiration in severe bronchitis is greatly accelerated, numbering 60, 80, or even 100 or more per minute, and each inspiration is usually accompanied by a moan. The pulse is in a corresponding degree accelerated, and is often feeble; the countenance is anxious and indicative of suffering, and the patient restless.

In this form of bronchitis the indications for treatment are: 2. To promote expectoration, and prevent clogging of the tubes; 1 To diminish the inflammation, and prevent its extension; 3. To strengthen the action of the heart and prevent exhaustion.

In employing measures to fulfil the first indication it should be borne in mind that the cough is useful as the only means of expelling the mucus, and that patients never do well with severe bronchitis that do not cough often. When asked by parents to prescribe something to diminish the cough, I inform them that the safety of patient depends on the strength and frequency of this symptom, and that it would be dangerous to put a stop to it by the use of opiate or other medicines, and I now very seldom combine an opiate with the cough mixture for severe infantile bronchitis. If the infant be allowed to cough every five or ten minutes, and the cough be rendered as loose as possible by appropriate remedies, it will do better, according to my observations, than when the cough occurs at longer intervals. If it requires sleep, I give medicine separately once or twice daily, as in the following formula for a child of one year:

℞.—Liq. opii compositi (Squibb's) . gr. xij.

Potassii bromidi	ʒ j.
Syr. rubi idæi (raspberry) . .	ʒ ss.
Aquæ	ʒ iss.—M.

Sig. Dose, one teaspoonful.

I have seen much harm done by employing stupefying agents which, while they produce sleep, also cause suspension of the cough, upon the strength and frequency of which the safety of the infant depends. The very prevalent opinion among the laity that the cough does no good to the infant unless mucus is ejected from the mouth, needs to be corrected. In order to obtain their full co-operation, I often find it beneficial to explain to the mother or nurse the process of expectoration in the infant, so that they understand that the tubes are freed from mucus as effectually when it is swallowed, after the cough, as when it is received upon the handkerchief.

Among the agents to fulfil the first indication mentioned above—that of promoting expectoration with the least possible loss of strength—the first place must be given to the ammonium salts; of which the two in common use are the carbonate and muriate. The carbonate is both a stimulant and expectorant, but its irritating property is such that it should not be prescribed in a larger dose than one grain to the drachm: a larger dose frequently rejected may produce gastritis, especially if there be little food in the stomach. It has been known to produce gastritis in animals when administered in considerable quantity, and its

irritating action on the fauces can be noticed by any one who swallows a solution of two or three grains to the drachm. The Curator of the Foundling Asylum has noticed in the cadaver the ill effects of the more irritating ammonium preparations. In one instance in which the aromatic spirits of ammonia had been employed, it was supposed with sufficient dilution, the extent and severity of the gastritis were such that it seemed as if this agent might have hastened the fatal result. The preferable way of employing this valuable agent, to prevent its irritating action upon the stomach, is to prescribe it dissolved in water, and order each dose to be administered in a tablespoonful of milk. The muriate does not possess the irritating property of the carbonate, and it can be safely administered in double or treble the dose of the latter, and at short intervals. It is therefore, I think, to be preferred to the carbonate in most cases of severe bronchitis, except at an advanced stage, when an active stimulant of the heart is required.

In this connection, I will state my conviction that the ammonium salts, whether the carbonate or muriate, are not given in sufficiently frequent doses in the practice of most physicians, in severe forms of the disease which we are now considering. If there be marked dyspnœa, and urgent need that the mucus be expectorated from the tubes which it is obstructing, I think that the effect is better if the dose be administered every half hour instead of every second or third hour. Half-hourly doses are not inconveniently given if the vehicle be milk.

The muriate of ammonium may, like the carbonate, be administered in milk, but the following is with me a favorite formula:

℞.—Ammonii muriat. . . . ʒ j.
Syr. bal. tolut. . . . ʒ ij.—M.

Fifteen drops, which contain one grain of the muriate, should be given to an infant of three months, and thirty drops, or two grains, to an infant of six months. Physicians, in my opinion often defer too long the use of the ammonium salts, using for the first days depressing remedies instead. The infant suffering from dyspnœa, and requiring a strong and frequent cough to expel the mucus, may, according to my observations, take the muriate from the first day of the sickness with benefit; and every half hour or hour when it is awake. No harm can result from the use of this agent in frequent doses, and for several days, such as might result from the carbonate.

The ammonium salts tend to increase the frequency of the cough, perhaps by the slight irritation which they produce upon the fauces in the swallowing. The muriate may be employed so long as an expectorant is required, and usually with as much benefit as can be derived from any drug.

As regards the use of those other common expectorants which have long been employed, particulary senega and squills, those have been better observers than myself who have witnessed any marked benefit from them.

It is so necessary, as a means of relieving the dyspnœa, to assist the infant to expel the mucus with which the tubes are clogged, when the respiration is much embarrassed, that an emetic is sometimes proper. One should be selected which causes little exhaustion. The syrup of ipecacuanha may be employed, given with an alcoholic stimulant, as brandy or whiskey. Infants a few months old I have sometimes temporarily relieved by moving with the finger or a swab the mucus that collected upon the fauces. This simple operation produces a forcible cough, and sometimes vomiting by which a large amount of mucus is expelled.

The necessity of sustaining the strength of the patient, and, at the same time, of reducing the fever, has led to the employment of quinine by many, perhaps most, physicians in the treatment of severe infantile bronchitis. I cannot say that I have noticed any marked reduction of temperature from its use in bronchitis or broncho-pneumonia, but it has seemed to me that it has been useful as a heart tonic. Much harm may, however, be done by employing quinine in the treatment of infants, by the use of doses too large. In the adult, according to the sphygmographic observations of Dr. M. Putnam Jacobi, while quinia in a dose of five grains increases the stength of the heart's contraction, a dose of twenty grains enfeebles the contractile power of the heart in a marked degree. According to Stillé and Maisch, "Poisonous doses occasion dyspnœa and noisy respiration, which is also jerking, interrupted, retarded, and finally arrested" (*National Dispensatory*). A dose too large, therefore, would be likely to produce just such symptoms as occur in severe broncho-pneumonia. To an infant aged one year, with this disease, I do not give larger dose than one-half grain to one grain of the sulphate of quinia, every fourth hour, as in the following formula:

℞.—Quiniæ sulphat..... gr.xij.
Ext. glycyrrhiz .... ʒ ss.
Syr. pruni Virginiani..... ..ʒ ij.—Misce.

Quinine, however, administered to an infant is very likely to cause vomiting from its bitterness, a result which I do not regret in the treatment of capillary bronchitis, because it causes the expectoration of considerable mucus. The second or repeated dose is usually not vomited. It is difficult to appreciate the beneficial effects of quinine in this disease, but that it does increase the contractile power of the heart seems probable.

If the temperature rise above 103°, if the infant have a full and strong pulse and flushed face, and if the lungs are not involved, or but slightly inflamed, antipyrin may, according to my experience, be safely administered, in proper dose, and with beneficial effect as regards the febrile movement. It should not be administered at stated intervals, but according to the temperature, so that, perhaps, only one or two doses daily may be sufficient. When the lungs are implicated, and the patient has severe broncho-pneumonia, I have seen such pallor from a single dose of antipyrin, in one instance, that I did not dare to

repeat it. It seems to me, therefore, that there should be a careful discrimination in regard to the cases in which it should be employed, so that, while vigorous infants, with severe bronchitis, without pneumonia, or with but slight pneumonia, are benefited by its use, feeble infants, with weak pulse or with extensive pneumonia, and young infants, incur too great risk to justify the employment of this agent, until its exact therapeutic effects are more clearly ascertained.

When the pulse is becoming more rapid and feeble from the extent and severity of the inflammation, the use of digitalis is indicated as a heart tonic. Not infrequently in severe bronchitis, with the minute tubes clogged with muco-pus, the heart is taxed to the utmost to carry on the circulation. Digitalis may furnish the needed assistance by increasing the contractile power of the ventricles. It is, therefore, an important remedy in a large proportion of cases of this form of bronchitis. Two drops of the tincture of digitalis may be given every second hour to an infant of eighteen months, during three or four days, or longer, if the action of the heart be oppressed so as to require it. But no one of the medicines which I have mentioned is more urgently needed in severe infantile bronchitis than alcoholic stimulation. It may be employed at an early stage when the heart begins to fail, without fear of increasing the inflammation.

A rule with me is to give two or three drops of brandy or whiskey for each month in the age of the infant after the third month. It should be given hourly, or each second hour, by day and by night, when the infant is awake.

Local treatment. The external treatment of infantile bronchitis has changed greatly within the recollection of the older members of the profession. Thirty-five years ago the pernicious teachings of Broussais still had some influence, and the application of one or more leeches to the chest was recommended in the text-books. Leeching did apparently cause some alleviation of the suffering, and, according to my recollection, an easier breathing for a time; but any good which resulted from it was more than counterbalanced by the loss of strength, as indicated by pallor of the countenance and a feebler pulse. It has been properly abandoned during the last twenty-five years, and is not likely to be employed again as a remedial measure. The same may be said of vesication. Under the teaching of the schools and the books, vesication was employed after the bleeding from the leech bites had ceased. Witnessing the restlessness and increase of suffering which the fly-blisters produced, I abandoned its use in the first two or three years of my practice, employing instead the cantharidal collodion, applied in points or small patches, half an inch in diameter, over the anterior part of the chest. It is now many years since I have used the Spanish fly in any of its forms or witnessed its use in the practice of others in infantile bronchitis, and the disrepute into which it has fallen is not to be regretted.

But how shall the chest be treated? Writers mention the benefit derived from revulsive measures applied to the chest. Prof. Henoch, of Berlin, whose opinions have great weight with all who are familiar with his writings, recommends, dry cupping for its revulsive effect. Says he, "Instead of leeches, I now apply wet, and especially dry cups (four to eight, according to the age), as these have at the same time a revulsive effect." The question may be properly asked Does revulsion do any good? How can producing an afflux of blood to the surface of the chest diminish the severity of the bronchitis, since the bronchial tubes derive their supply of blood from a different branch of the aorta from that which supplies the walls of the chest? However it may be explained, slightly irritating applications which produce moderate redness of the surface of the chest, do seem to assuage in a measure the suffering of the patient, and aid in procuring the needed rest. After observing their effects for many years, I have found no better mode of external treatment for infants under the age of two years, and for all weakly infants whatever their age, than the application of a flaxseed poultice properly prepared. But instruction should be given in the preparation and application of the poultice with all the details which Abernethy was wont to give to his class. A poultice which, in a few hours after its application, lies in a mass upon the epigastrium with the chest bare, does more harm than good. The poultice should be of uniform thickness, of about a line, between two thickness of linen, or thin muslin, and so moist that it wets the hands in holding it. For infants under the age of six months, camphorated oil should be thickly smeared on its under surface; for those between the ages of six and eighteen months, instead of the camphorated oil the flaxseed should be mixed with one-twentieth its weight of pulverized mustard, and for those above the age of eighteen months the mustard should be one-sixteenth part. In all those cases in which the respiration is not only hurried, but painful, and accompanied by a moan, and in which the cough is painful, the whole chest should be covered by two poultices, as thin as mentioned above, one over the anterior and the other over the posterior surface, fastened together over the shoulders, and under the arms by small safety-pins, and covered externally by a snugly fitting oil-silk jacket. The poultices thus made should be reapplied morning and evening. They usually cause redness of the surface without pain, but they have never, in my practice, vesicated. They should be continued during the active period of the inflammation. Repeatedly, I have observed the breathing become easier by their use. At the same time, if the febrile movement be so great that it requires to be reduced, an ice-bag may be placed upon the head, and the hands and forearms be frequently sponged with cool water or alcohol and water.

Cool water dressing applied to the chest has its advocates, and, although I believe that the poultices give most relief to the majority of infants, it does not seem improbable that robust infants over the age of twenty months with high temperature may sometimes obtain relief from its use. Prof. Henoch writes : " I strongly advise hydropathic applications to the chest from the neck to the umbilicus. A napkin or diaper is dipped in water at the temperature of the room, well wrung out, and then placed around the chest, without exercising any compression, so that the arms are free. This is surrounded by a roll of batting, and then covered by a layer of oil-silk or gutta-percha paper." If the temperature be high, this application should be renewed every half hour, and it may be continued several days. If it be renewed at long intervals, its effect is obviously like that of a poultice.

If the patient begins to convalesce, the application to the chest, whether water or the poultice, can soon be omitted, and batting covered with oil-silk be substituted for it. Finally, the position of the infant, when there is marked dyspnœa, indicating extension downward of the inflammation, should be frequently changed, since a change in position tends to prevent pulmonary congestion, and aid the expectoration. If the infant be placed over the shoulder or upon the lap of nurse with face downward, its expectoration is often facilitated. Moisture in the room, as that produced by boiling water, also aids the expectoration, probably by rendering the muco-pus thinner and less viscid. When bronchitis occurs in a constitutional disease, as measles or pertussis, as an element of it, it continues as long as that disease lasts, but it can be made milder or less annoying to the patient by remedies such as those mentioned above.

HEADACHE.*

By Dr. W. R. Chittick.

The study of headache is as interesting as it is difficult. It is a complication that we meet with in the majority of cases, and in many of them it is the most prominent symptom complained of.

The study of this trouble by itself has been neglected, I think, more than any other prominent disorder. If we turn to the text-books for information on the subject we find much less than we wish we could, and when we have done with our search we can sum it all up in a very small space. This may be owing to the little importance which some authors regard the subject, or it may be due to a want of a clear understanding of so really difficult a matter.

Headache is usually a sympathetic disorder. But there are cases where it is a prominent symptom of organic disease.

The main cause of headache is a disordered circulation, or, we might say, a disturbance of the vaso-motor system. Another cause is the presence of some toxic substance in the blood. These with that condition called " nervous " will in a rough way, cover the ground of causes of headache.

But they may be still further divided, and for the sake of convenience I will so consider them.

Congestive Headache is one frequently met with. It is caused by an excessive amount of blood in the head. It is known by a flushed appearance of the face, congested eyeballs, a full, bounding pulse. The pain is throbbing in character, is made worse by stooping or moving the head quickly. There is distension of the arteries going to the head, or there may be a diminution in the calibre of the veins which prevents a return flow of blood through them. This may be due, and I think it is, to some irritation of the nervous centres. A vitiated atmosphere, by reducing the amount of oxygen, and causing a retention of waste product in the blood is often the cause of it. This will sometimes account for those headaches which patients have on awaking in the morning.

Fresh air, cloths rung out of *hot* water, caffeine, bromide of potassium, ergot, digitalis, aconite and other arterial sedatives, are the remedies most useful in this form of headache.

Anæmic headache.—This form of headache is due to a lessened amount of blood circulating through the cerebral arteries. It is usually caused by spasms of the arteries, and may be removed by the horizontal position and such remedies, as will relieve the spasmodic action of the blood vessels. Nitrate of amyl, nitroglycerine, cocaine, codeine, and belladonna, are among those that are the most useful.

Headache due to general anæmia should not be confounded with those due simply to passive anæmia of the brain only. In this disorder there is an impoverished condition of the blood. Persons laboring under this condition of things will often try to do more work than they are capable of, and, therefore, force an illy-nourished and nervous system beyond its capacity.

Anæmic blood is like watered milk—is decreased in nourishing qualities; therefore it is easy to see how an organ like the brain, with its numerous nerves, will suffer when compelled to work on poor food.

Anæmic headache usually effects that part of the head that is nearest the arteries that supply the brain, namely the temples, brow, occipital region, etc.

Iron is of course indicated where there is anæmia. The preparations that I like best are Blaud's pills, made freshly; liquor ferri nitratis, perchloride and persulphate of iron, and last, but not least, Rabuteau's pills.

Headache caused by cerebral exhaustion is probably the most difficult to treat. Cerebral exhaustion is caused by over-work of the brain. This is peculiarly an American difficulty. Men and women will work, worry and wear themselves away in spite

* Read before the Detroit Academy of Medicine.

of all the advice physicians are willing to give them.

Business men are worried by financial troubles; wives are worried about social matters; young men and boys are worried in regard to school and college matters, or perhaps dissipate; girls are asked to do more in schools or shops than is reasonable to ask of a young and developing female. In these days of railroads, telegraph, telephones, fast machinery, and other methods of rapidity and competition, there can be found causes enough for overwork. Whatever the cause the effect produced is annoying and dangerous. The brain is in an irritable condition and forms a central point for general irritation. All sorts of ills, fancies and conditions are produced, and little can be done until the cause is obliterated.

The treatment of such cases is, first, proper food; not only the digestion but the assimilation must be looked after. In the meantime medicine must be administered. The best drugs for this condition are the alkaloid caffeine, (the citrate of caffeine is said to be only a mixture), monobromide of camphor, codeine, nux vomica, quinine, gelsemium, guarana, fluid extract camellia; iron and other tonics.

Intermittent headache is due to some malarial derangement manifested in this manner. Quinine is the most prominent remedy and may be aided by other remedies.

Habitual headache is due to some derangement of the systems usually of the stomach or bowels. When we enter upon the discussion of the so-called "stomach" headache we simply enter upon a discussion of the disorders of digestion. Headache arising from indigestion is sympathetic and reflected through the pneumo-gastric nerve, or is the result of toxic material (ptomaines probably), produced by some fermentative changes in the stomach and taken up in the general circulation. It may be a derangement of the liver that causes the headache; then it is called *bilious* headache and is sometimes very severe. Obstruction to the free escape of bile or interference with the normal functions of the liver—either an increased or diminish secretion are among the causes.

Reflex irritation from *genito-urinary* organs is also a source of headache. This is noticed in some patients about the period of menstruation. In others displacements and disorders will cause pain in the head, usually on the top of the head.

Astigmatism, if not corrected, will almost always cause headache if the eyes be used much. The disturbance in these cases may become so great as to cause disturbance, through the nervous centre of the stomach. Ear troubles also sometimes cause headache, but as I do not recollect treating any cases from this cause, I will have to pass over it.

External pains of the head, often called headache, are due to a variety of causes. Syphilis often causes headache, if the membranes of the brain are affected. Rheumatism of the scalp is often mistaken for headache. Neuralgia of the supraorbital, occipital or auricular nerves is at times very troublesome. These require anti-neuralgic treatment.

A few words on the remedies used in the treatment of headache and I am done. Caffeine is a very valuable remedy in this disorder, but should not be give in doses of more than two grains at a time; large doses are apt to produce nausea.

Codeine has many valuable qualities. It seems to me to have an action like opium and the bromides combined. Its cost, however, ($12.00 per oz.) makes it an expensive drug to use.

Monobromide of camphor, in doses of two to six grains, is excellent for slight nervous headache.

A combination of caffeine and codeine is very good, but do not put monobromide of camphor with them—it will surely produce nausea. Guarana is an excellent remedy for hyperæmic headache and has some advantages over caffeine.

Fluid extract of camellia and of coffee owe their usefulness to the caffeine they contain.

The bromides are probably used more than any other class of remedies in headache. Their use should be confined exclusively to congestive headaches, except where they are used in conjunction with other remedies.

Ergots and digitalis are useful when we wish to tone up the blood-vessel or diminish their calibre, or to steady the action of the heart itself.

Aconite is occasionally indicated when it is necessary to get control of the heart.

Quinine, salicylic acid, opiates, hyoscyamus, belladonna, gelsemium (particularly where there is neuralgia), and nux vomica, are often indicated, and, when used in combination with some of the remedies first mentioned, will add to their effectiveness.

Nitroglycerine in small doses is very useful in headaches due to spasm or anæmia of the brain. Its acts very promptly.

Cocaine, on account of its peculiarly soothing and quieting action, is excellent in headaches due to cerebral exhaustion and other nervous conditions.—*Detroit Lancet.*

Constipation in infants is thus treated by various writers in the *British Medical Journal*:—

Dr. W. R. Cossham has generally found much benefit from ordering the infant to be fed every morning with a cupful of gruel, which may be sweetened with treacle or honey. Further help is obtained by giving a teaspoonful of cod-liver oil twice a day, and using friction over the bowels every night with olive-oil on the palm of the hand. An occasional morning draught may also be necessary, such as tinct. podoph. miij (gr. ii ad ℥i); pulv. ipec. gr. ¼; glycerini ℥i; aquam anisi ad ℥ss.

L. suggests two or three meals of "Mellin's food" daily. He has found this useful, and has long since dispensed with drugs as much as possible in the treatment of some troublesome cases.

If the infant is being nursed, two or three meals a days will be sufficient, and these may be dispensed with as soon as the object is attained, and resumed if necessary; but if it be living upon artificial food, "Mellin's food" should be substituted.

Mr. E. Gibson Berkley says that the liquid extract of cascara sagrada, combined with minute doses of tincture of nux vomica, and made palatable with a little syrup of lemon or glycerine, will be found very useful. It should be given two or three times a day.

Sign-Post recommends feeding the infants on well-made oatmeal gruel and milk, in proper quantities, and at intervals. For an infant from four to six months old, he advises half the feeding-bottleful of milk, with the same quantity of oatmeal gruel, to be given every four hours. The directions for preparing the gruel are as follows: Take a teaspoonful of the common coarse, but sweet (not bitter), oatmeal; let this soak in a little more than a tumblerful and a half of cold water for some hours, say all night; then place this meal, and the water, in a clean, covered saucepan capable of holding double the quantity of the liquid poured in; place the saucepan near the fire, so as to heat the contents slowly, and after a time place it on the fire, and stir the contents, until, and for a minute or so after, it boils; then pour the contents on to a horse-hair sieve; the creamy gruel is made.

Mr. M. F. Bush advises a spill of paper dipped in castor-oil about two or three inches, and inserted into the lower bowel. It should be used every day for a time.

ON THE TREATMENT OF FURUNCLES.

THE *Boston Medical and Surgical Journal* (*Medical Age*) writes:

Gingeot has contributed to the *Bulletin Général de Thérapeutique* (t. cviii.) a valuable series of articles on the treatment of boils and carbuncles, of which the following is a summary:

Brodie, in his lectures on pathology, published in 1846, advanced the view that the furuncle was a species of eruption analogous to smallpox, and a local expression of a poison circulating in the blood. Alphonse Guerin, in the article Anthrax in "Jaccoud's Dictionary" (1865), teaches that furunculosis is a septicemia, and assigns to it an intermediate position between the general affections which localize themselves, and those which, becoming generalized, result from a lesion primarily local.

The contagiousness of furunculosis was established by Startin in 1866. He proved (1) the auto-inoculation of the contagium by scratching; (2) the transmission from individual to individual by contact (as by occupation of the same bed); (3) the development of boils on the hands of surgeons and dressers consecutively to their being wounded with a bistoury which had been used in opening a furuncle. Lanuelongue inoculates patients with matter from boils, producing in the point of puncture furunculous eruptions.

It is not only proved that boils and carbuncles can be transmited from man to man by contagion, but the active principle of the contagion, according to Gingeot, has been discovered. For this discovery we are indebted to Pasteur, who, on applying to the furunculous affection the same means of study as had been applied by him to the investigation of the pathogeny of sponic fever, fowl cholera, and other virulent diseases, "has been able to demonstrate that every furuncle contains certain microscopic parasites, and that it is to these that there are due the local inflammation and the pus formation." This microbe is called by Pasteur the torula pyogenica; this mycologist, moreover, identifies this bacterium with that of abscesses of the soft parts, of osteomyelitis, and of puerperal fever; certain it is, however, that the product of cultures of furunculous origin has never given rise, by inoculation in animals, to anything but simple abscesses, never to furuncles. Gingeot explains this fact by referring to the peculiarity of the tissue, namely the glandular apparatus of the skin (and especially the pilo-sebaceous glands), where the furuncle has its seat; the inoculation of the microbe would have a different result according as such inoculation were made into a follicle, or into the subcutaneous cellular tissue. M. Lowenberg has repeated Pasteur's cultures and inoculation experiments, and has confirmed them; he has also shown the part played by hairs in the collection of germs. The view which he adopts, and which Gingeot indorses, makes furunculosis a parasitic disease resembling scabies, and the old humoral notions respecting the etiology of boils and carbuncles are repudiated. It is, however, certain that furunculosis is attached by many bonds of union to the other virulent affections. A certain predisposition of constitution is necessary; the torula does not thrive unless it finds a favorable medium. This predisposition is found in certain debilitated states of the economy from overwork, alcoholism, diabetes, lithemia, etc., in which there is such modification of the secretions of the skin as renders the piliferous and sebaceous glands a suitable habitat for the torula pyogenica.

The indications of treatment are: (1), if possible, to cause the furuncles to abort; (2) this indication being impossible of fulfillment, to moderate the amount of suppuration; (3) to antagonize the constitutional condition which favors furunculous productions.

There are two principles laid down as the fruit of large experience: first, never to open early; second, seldom or never to open, even if suppuration has taken place, but to leave the boil or carbuncle to nature. Since the furuncle is a parasitic affection, the essence of the treatment ought to consist in destruction of the parasite. One of the first precepts is to apply no poultices. Even when put on cold, the poultice has no power to stay the

development of the furuncle, and when warm it can only favor such development, as heat and moisture promote the vital activity of the lower organisms; moreover, the organic substances of which the poultice is made furnish a contingent of food to the parasite. Even when the boil has gone on to suppuration, the poultice is rather injurious than otherwise, aiding the penetration of new follicles by the microbe, by spreading the pus over the skin and keeping it in contact with the glandular orifices dilated by the heat.

One of the external remedies likely to be most successful in the abortive treatment of furuncle, and which Gingeot highly recommends, is the tincture of camphor. Both the alcohol and camphor in this preparation are excellent parasiticides. The camphorated spirit is applied to the part by means of a compress, and allowed to remain in contact with the skin for a few minutes. Thus treated, boils, if taken at the commencement, are frequently made to abort. The application should be made three or four times a day.

Another good agent for fulfilling the same indication is tincture of iodine, which should be painted freely several times a day over the furuncle and a little beyond. If applied till epidermic desquamation takes place, the iodine tincture does no harm, and if it does not always prevent, it certainly moderates, suppuration, thus fulfilling the second indication and better than (perhaps) any other remedy. Gingeot believes that the iodine does good by its superlative parasiticide action; "the parasites can not escape contact with the liquid, which is introduced by capillarity into the glands, and by endosmosis into the acuminated vesicles of the top of the furuncle."

The same treatment is applicable in the early stage of carbuncle, and will often arrest its development; if, however, the progress of the carbuncle can not be stayed, a strong solution of carbolic acid (equal parts of the strong acid and glycerin) must be brought in contact with the diseased tissue, as Dr. Eade, of London, recommends.

The central cord or stem must be destroyed; this may be done by freely applying the carbolic acid through any opening which may exist in the center of the swelling, or a sufficient opening may be made with acid nitrate of mercury.

When the furuncle is opened and discharging, the usefulness of tincture of iodine is ended. Then there is nothing better than boric acid applied in the form of fine powder, which is freely dusted over the boils, or of the saturated aqueous or alcoholic solution which is kept constantly in contact with the diseased parts by means of compresses soaked in the liquid.

As for internal medication, Gingeot has nothing better to suggest than the recommendation to follow out the line of treatment several years ago indicated by Dr. Sidney Ringer, and indorsed by Dr. Duncan Bulkley. This consists "in the administration from the first of sulphide of calcium in small doses (one-sixth or one fourth grain) every two hours. It is worthy of note that in the excellent paper which Dr. Bulkley read at this meeting, he coincides very nearly with the line of treatment above briefly summarized.—*Cincinnati Medical News.*

DIARRHŒA AND DYSENTERY IN CHILDREN.

Diarrhœa in children is an increase in the frequency and amount of the alvine evacuations, with a thin or watery character, and admixture of fecal lumps, undigested food, and, perhaps, mucus. In children under one year the cause is often in the state of health or habits of the mother or nurse, from a faulty method of feeding, or resulting from cold or dampness. In children over one year the cause will be either dentition or errors of diet. Impure air or the direct effect of a high temperature in summer, may be considered as causative conditions. We may distinguish several varieties—Simple: where there is only a moderate increase in the frequency, amount and fluidity of the normal dejecta. Lienteric: the discharges similar to the preceding, but containing considerable portions of undigested food; occurring mostly in children badly fed, and pointing to an imperfect digestion. Choleraic; the passages very thin and squirted from the anus as if from a syringe; these discharges do not have the normal acid odor, but are usually fetid, and have an alkaline reaction—the so-called cholera infantum. Mucous diarrhœa: the passages containing considerable mucus, some times streaks of blood, and attended with pain. These different varieties are more or less blended in most cases. Stools possessing a putrid odor indicate involvement of the mesenteric glands, and such cases usually terminate fatally. Bad methods of nursing or feeding are responsible, more than all other preventable causes combined, for the prevalence of summer diarrhœa. If a mother cannot suckle her infant, it is best to provide a wet nurse. When a wet nurse cannot be employed, milk is the only suitable food for young infants. It should be diluted with from one-half to one-fifth part of water, for infants under a year old, and add fifteen grains or half a teaspoonful of soda to each pint, which prevents the casein from forming in such hard coagula and neutralizes any acidity which may have developed; or a tablespoonful or two of lime water may be used instead. It is well to test the milk with litmus paper as a guide to the quantity of soda or lime water to be added. In the case of children with very weak digestion, from five to ten grains of pancreatin may be added, first dissolving it in a little water, and giving the milk blood-warm. If, notwithstanding this, curds are vomited, or three-quarters pass through, the milk may be digested half an hour with pepsin at a temperature of about 100°, then strained through a fine sieve, and the whey given with or without a portion of the finely divided curd. It is best to sweeten the

milk with sugar of milk. In some cases of diarrhœa attended with vomiting, the white of an egg, diffused in a pint of water, will be well retained and afford a grateful and nutritious drink. The doctor has no great confidence in infants' foods. If cow's milk will not agree, he tries condensed milk, and alternates it with some of the semifarinaceous food in children three or four months old. Nestle's milk food he has found as reliable as any of its class. In the simpler forms of diarrhœa, a few doses of gray powder will often be the only remedy required. Calomel in small and frequent doses will be useful in case the discharge is devoid of coloring matter (white or chylous diarrhœa). No mercurial should be long continued. Lienteric diarrhœa, pointing to disorder of the primary digestion, will be benefited by nux vomica, drop-doses or less of the tincture. Green or mucous passages, with much griping, will find an appropriate remedy in ipecac in doses short of an emetic effect. Watery passages with pain and sleeplessness will be well met by a few efficient doses of Dover's powder combined with bismuth. Whiskey should be given when there is prostration. The doctor likewise uses a trituration of liquor arsenicalis, 1-100 to 1-200 grain to the dose, in great loss of vital powder. Where the nervous system is much disturbed, the doctor gives veratrum album, from one quarter to two drops every hour, with good results. Teaspoonful-doses of camphor water are good at the onset of a severe attack with liquid stools. Dysentery is more severe and dangerous than ordinary diarrhœa. It is often preceded for a day or two by malaise, fever, and dyspeptic trouble; then the bowels act more frequently and loosely than usual, and soon the passages become bloody and slimy. The classic treatment of opiates and laxatives will suffice for a cure in a majority of cases, but success will depend largely upon their judicious employment.—*American Journal Obstetrics.*

THE TREATMENT OF PROFUSE HÆMOPTYSIS.

In discussing the treatment of hæmoptysis, of course only the cases in which the hemorrhage is profuse need to be considered, for slight hæmoptysis requires no definite treatment. In the treatment of the serious form the general methods employed must be the same as that for profuse hemorrhage from other parts of the body; and although containing no new points, the paper recently read by Dr. Samuel West before the Medical Society of London (*Brit. Med. Journ.*, January 16, 1886) contains the most successful methods, brought together in such a succinct way that it is worthy of being laid before our readers. Dr. West shows that rest, absolute of the body as a whole and of the diseased part so far as possible, is the main essential principle; and with this object in view the patient should be kept in a recumbent position, speaking prohibited, cough checked, and excitement avoided, or, if present, controlled by drugs. These indications are best met by the use of opium, which Dr. West regards as indispensable in most cases of hæmoptysis. Of the so-called hæmostatic remedies two groups may be formed,—the topical astringents and the vascular constringents. Chief among the former are the perchloride of iron, alum, gallic and tannic acids, and acetate of lead; but, powerfully as these remedies act when applied to the bleeding surface, it is difficult to see how they can produce the same local effect when administered by the mouth, for it is hard to comprehend how a few minims of dilute solution introduced into the stomach can produce an effect which the undiluted solution can effect only when applied directly to the bleeding surface; consequently, if they act at all, it must be by producing vascular constriction. Of the groups of remedies which produce vascular contraction, digitalis and ergot are the most prominent examples. Both of these drugs produce contraction of the peripheral arteries, and if hæmoptysis were due to capillary oozing they might possibly arrest the hemorrhage; but we know that hæmoptysis is not due to capillary oozing, but to lesions of fairly large vessels. Hence these remedies, instead of being useful, may be even dangerous, and increase the hemorrhage. Hæmoptysis always tends to stop itself, from the fact that the blood-pressure is reduced from the loss of blood, and the greater the reduction the greater is the tendency to form a clot. This fact has long been recognized, and therefore one of the early standard methods of treatment of hæmoptysis was to produce hemorrhage from other parts by free blood-letting; and although blood-letting is now believed to be indicated in but very few cases, an attempt may be made to reach this end, not by removing the blood from the body, but by detaining it in some part of the body distant from the seat of the hemorrhage. This may be, to a certain extent, accomplished by extensive dry cupping, or by dilating some of the vast vascular systems of the body, and making them act as temporary reservoirs for the blood. This might possibly be accomplished by producing purgation, or the cutaneous system might possibly be dilated through pilocarpine, or even nitrite of amyl; however, the possible objection to the use of these drugs is they dilate the vessels of the lungs as well. Then, again, the blood-pressure may be influenced through the heart, as by use of cardiac depressants, of which antimony is the most reliable; while, lastly, diet is of the very greatest importance. The principle of absolute rest and restricted diet should be applied in all cases of hemorrhage. It is thus seen that without giving a long list of drugs, or discussing in detail the various methods of treatment of hæmoptysis, Dr. West indicates the conditions which have to be fulfilled and the essential principles which should guide our choice of remedies. Our treatment of hæmoptysis is as yet extremely unsatisfactory, and perhaps the

following out of some of the lines of treatment suggested above may lead to valuable results:

EXPERIMENTS WITH NUMEROUS DRUGS ON THE BACILUS TUBERCULOSIS.

If Koch's bacillus tuberculosis is actually the cause or infectious agent of tuberculosis, the labors of Sormani and Bognatelli to ascertain the effect of various drugs on the microbe are in the right direction to possibly advance the therapeutic aspects of this affection. We abstract from their papers, "Ricerche Sperimentali sui Neutralizzanti del Bacillo Tubercularea Scopo Profilatico" and "Ulteriori Ricerche sui Neutr. del Bac. Tuberc." Milano, 1885, simply their general conclusions.

Both authors tested a number of chemicals, especially such which could be therapeutically considered as to their influence upon the vitality of bacillus tuberculosis. One c. c. (16 gtt.) of sputum, in which the presence of a large number of bacilli was previously ascertained, was, under the ordinary precautions, mixed with a certain quantity of the drug to be tested, the mixture preserved at a temperature of 35° to 40° (C.) one to two hours, then mixed again, and by means of a disinfected syringe injected in the abdominal cavity of guinea-pigs. These animals, unless they died sooner, were killed after two or three months and examined for bacilli. A large number of drugs showed no or a very slight pertinent action. An appreciable antibacillar effect was obtained from the following drugs in an ascending order: lactic acid, camphor, bromide of ethyl, napthol, turpentine, chloride of palladium, creasote, carbolic acid, and corrosive sublimate. The following drugs showed likewise some antibacillar virtues; benzine, toluol, oil of carraway, essence of cloves, guajak, chinolin, menthol, and creasote.

THE MANAGEMENT OF PLACENTA PRÆVIA.

Dr. Malcolm MacLean offers the following rules as those which should best govern the treatment of placenta prævia (*Amer. Journ. Obstetrics*, March, 1886):

First.—In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest,—body and mind,—and a mild opiate is often desirable at this stage to quiet irritation.

Second.—Inasmuch as the dangers from hemorrhage are greater than all else to both mother and child, at the earliest moment preparations should be made to induce premature labor; and labor being once started, the case should be closely watched to its termination by the accoucheur.

Third.—In primiparæ, and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

Fourth.—In the majority of cases generally, and in all cases especially where there is reason to believe that rapid delivery may be required, it is more safe to rely upon the thorough continuous hydrostatic pressure of a Barnes's dilator than on pressure by the fœtal parts.

Fifth.—Where the implantation is only lateral or partial, and where there is no object in hurrying the labor, bipolar version, drawing down a foot and leaving one thigh to occlude and dilate the os, may be practised according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

Sixth.—The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

Seventh.—In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

Eighth.—In some cases, in the absence of sufficient assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions and the voluntary efforts of the mother. In case of favorable presentation,—occiput or breech,—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and child will be expelled rapidly and safely without artificial assistance.

Ninth.—The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

Tenth.—Whenever it is possible, dilatation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

Finally.—As cases of placenta prævia offer special dangers from post-partum hemorrhages, septicæmia, etc., the greatest care must be exercised in every detail of operation and nursing to avoid conveying septic material to the system of the mother.

Absolute cleanliness, rather than chemical substitutes for that virtue, should be our constant companion in the practice of the obstetric art.

TREATMENT OF CHANCROID.

The *Journal of Cutaneous and Venereal Diseases* learns the following from its French correspondent. M. Maurice Notta has put forth an article in *L'Union Médicale*, July 18, 1885, treating of the different methods which have been employed for the treatment of simple or non-infecting, non-syphilitic chancre—the chancroid of English and American writers. He divides them into two kinds—one in which only a topical and superficial action is sought to be produced upon the chancroid; and another which aims at its complete destruction from the very base, and its transformation into a simple sore. To the first class belong the applications of aromatic wine, tartrates of iron and pot-

ash, glycerine, dilute tincture of iodine, decoctions of oak or of Peruvian bark, chlorine-water, resorcine oxygenated water, tincture of thuja, guaco, perchloride of iron, sulphate of iron, silicate of potassium, chloral; also of absorbent powders, such as those composed of calomel, bismuth, camphor, oxide of zinc, quinine or ratanhia. All these agents may produce good results, but they are less efficacious than those which constitute the second class. A soft chancre may be destroyed either by excision, which is scarcely ever an advisable procedure, or by cauterization, the means usually adopted. Formerly, the arsenical preparations, Ricord's sulphocarbolated, Vienna paste, acids more or less diluted, etc., were made use of for this purpose. In France, at present, we employ a solution of nitrate of silver, 1.30, bichloride of zinc, in the form of pate de Canquoin, or a concentrated solution of iodoform—this last having been brought into favor by MM. Besnier and Lailler in 1867—salicylic acid combined either with wheat flour or with powdered gum (one part of salicylic acid to four parts of excipient); pyrogallic acid, 1.5 (Vidal); finally, the thermo-cautery. Quite recently, M. Aubert, at Lyons, has resorted, with success, to the administration of prolonged hot baths; and I have myself effected cures of phagedenic soft chancres by means of very hot cataplasms repeatedly applied. According to M. Aubert, a temperature of 38 ° C., if maintained long enough, will suffice to modify the chancrous poison, and transfer the virulent ulcer into a simple sore. M. Notta believes that the most efficacious method hitherto devised consists in the complete and simultaneous cauterization of all the patient's soft chancres by means of the thermo-cautery, followed by an antiseptic dressing. I refrain from further details on this subject, since the management of chancroid is so admirably treated in the last edition of Bumstead and Taylor.

A NEW METHOD FOR THE REMOVAL OF FOREIGN BODIES FROM THE NOSE.

Dr. D. Bryson Delavan, of New York, writes to the *New York Med. Record* for January 23, 1886, as follows: "The presence of a foreign body in the nasal cavity is usually attended with marked swelling of the neighboring mucous membrane. Its extraction by any of the means in common use is accompanied with pain, often of great severity, and is often followed by a copious hemorrhage. The swelling offers, of course, a serious obstacle to the extrusion of a hard body, while one which has increased in size from the imbibition of water becomes all the more firmly impacted. Hence, in attempting the removal of the body, more or less laceration of the membrane is likely to occur. The pain, with difficulty tolerated by an adult, causes a child to become in almost every instance unmanageable, so that an anæsthetic is required. The hemorrhage is usually controllable after the lapse of a few minutes, but may, meanwhile, cause considerable annoyance. From our knowledge of the physiological action of cocaine upon the nasal mucous membrane, it is evident that, in the case in these cases, all the above difficulties may be overcome; for, applied to the part, the mucous membrane becomes strongly retracted, the sensibility to pain lost, and the blood-vessels exsanguinated. Thus the calibre of the fossa is greatly widened, the irritation and consequent resistance done away with, hemorrhage prevented, and the removal of the foreign body thereby greatly facilitated. To carry out the method, the occluded nostril should first be cleansed with a spray or a gentle current of some lukewarm alkaline solution, after which a four per cent. solution of cocaine should be applied to the mucous membrane. When its effect has become complete, the extrusion of the body should be attempted by directing the patient to blow forcibly through the affected nostril. Failing in this, it should be drawn out by some suitable instrument. Should the patient be too restless to make this practicable, an anæsthetic may still be administered. In cases of invasion of the frontal sinus or antrum of Highmore by insects or larvæ, cocaine should be applied to the membrane before the administration of chloroform or ether, in order that the canals leading to these cavities may become as patent as possible, and thus the vapor of the anæsthetic be admitted very thoroughly to the intruder's presence. The insensitiveness of the membrane produced by the cocaine will, in these cases, certainly add to the comfort of the sufferer should it be necessary to inject, or, still better, to spray the nose with chloroform."

THE PREVENTION OF BALDNESS.

It has been estimated that one-half the adult men of American birth living in our cities are baldheaded. The estimate is not exaggerated, if it is applied to persons above the age of thirty, and it may be rather under the mark. If, now, it be conceded that one-half of our American business and professional men are bald at the present time, it would be interesting to speculate as to the condition of the heads of their descendants some hundreds of years from now. The probabilities point towards a race of hairless Americans, for baldness is extremely liable to be propagated in the male line, and to appear a little earlier in each generation. The American nation is threatened with the catastrophe of a universal alopecia.

It appears to be worth while, therefore to, consider the subject of prevention, since no means have yet been found for the cure. Why are so many men bald before their time?

The answer has almost always been that it is due to the excessive strain and ceaseless mental and physical activity to which American methods of business and modes of living conduce. From the visitors' gallery of the Stock Exchange, for example, one views a mob of shining pates belonging, as a rule, to rather young men.

Any reformer, however, who expects to prevent baldness by changing American habits may as well stop at once, for he will surely fail. Now, there may be, perhaps, help in some other quarter. The sons of prematurely bald fathers should bear in mind that if they wish to save their hair it will only be through industrious attention to their scalp. This much-neglected surface should be thoroughly cleansed at certain intervals. It should be carefully and regularly examined, and if it be unhealthy, dry, and scurfy, the proper applications should be made to it. The wearing of unventilated hats is one of the greatest sources of failure of nutrition of the hair, and these must be avoided. The beard never falls out, because it gets plenty of sunlight and air. These are what the hair of the scalp needs, also. Women are less bald than men, because, for one reason, their scalps are better ventilated. In fine, civilization has made the hair producing organs of the scalp delicate and feeble. They have to be nursed and cared for, or they atrophy and disappear. Young Americans who do not wish to lose their hair before they are forty must begin to look after their scalps before they are twenty.—*New York Med. Record*, January 23, 1886.

VACCINATION.

A week or so ago, in looking over the morning paper, our eye caught sight of a paragraph stating that a riot had occurred in a city in Lower Canada, in consequence of an attempt on the part of the authorities to enforce general vaccination. Some two hundred men had assembled together, and declared that under no circumstances would they submit to this protective operation.

The prevalence of such a sentiment as this explains at once the unusual fact of a summer epidemic of small-pox in Montreal and adjacent Canadian territory. We unhesitatingly say that wherever small-pox prevails in this age of the world it casts a sombre light on the civilization of that place and nation. It proves that the people are ignorant, negligent, or blindly bigoted; it shows that the authorities are feeble, or blind to their duties; it reveals a condition of intellectual darkness which is far behind what should be the average of the last quarter of the nineteenth century.

Were the precautions taken which all physicians and intelligent laymen are equally familiar with, epidemics of small-pox would never occur again. These precautions are all summed up in the word, *vaccination*,—vaccination with pure virus, preferably that derived directly from the cow, repeated often enough to render it certain that the vaccinated person is wholly unsusceptible to the specific action of the virus. This is all, and this is enough. Long personal observation, including a period during the war, when we had charge of a small-pox hospital, and in camps where small-pox appeared in a malignant form, has impressed most incisively upon us the belief that vaccination, properly carried out, will conquer and prevent any epidemic of the disease, even under circumstances most favorable to its dissemination. Perhaps it will not eradicate it; but it will certainly reduce it to the level of one of the least to be dreaded of diseases which occasionally involve a fatal issue, and will positively prevent epidemics like this one in Montreal.

We urge, therefore, all physicians, all Boards of Health, all sanitary bodies, all intelligent laymen, to advocate frequent, and, if necessary, obligatory vaccination.

There is now not the slightest difficulty in procuring an abundant supply of pure vaccine matter. The methods of obtaining it from the animals have been carefully studied, and are nowhere carried out with more scrupulous and successful care than by those physicians in our own country who have devoted their attention to supplying this product. We should recommend that the virus be obtained directly from them or their agents, rather than through trade channels, as more than one instance has been creditably reported to us where the latter supplied humanized instead of pure animal virus.—*Phil. Med. & Surg. Reporter.*

CHIENE'S CONTRIBUTIONS TO PRACTICAL SURGERY.

Prof. John Chiene, in an admirable series of practical notes on every-day surgery, makes *inter alia*, the following suggestions:

In wounds of the face, the best stitch to use is horse-hair. Unless the wound is of considerable size, no form of drainage is necessary. The best dressing is a pad of salicylic cotton-wool, or corrosive wool, fixed in position with flexible collodion.

The introduction of the sharp spoon into surgical practice has greatly simplified the treatment of lupus. In the use of the sharp spoon, special care must be taken to scrape away the raised edges of the lupoid ulcer, as it is here that the pathological change is advancing. This is best done by scraping from the sound skin toward the centre of the ulcer. After the new formation is completely removed the best application is a powder which has been introduced into surgical practice by Dr. Mucas Championière, of Paris. It consists of (1) light carbonate of magnesia, which has been impregnated with the vapor of eucalyptus, (2) powdered benzoine, and (3) iodoform in equal quantities.

In persistent hemorrhage from the nasal cavity, plugging of the posterior nares should not be done until an attempt has been made to check the the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which

forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in the attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity the clot consolidates in position, and the hemorrhage is checked.

In the reduction of a dislocation of the lower jaw, the patient should be seated on a low stool before the surgeon, in this way the surgeon gets a sufficient leverage, standing above the patient, and the reduction of the dislocation is simplified.

In the division of a tight frænum of the tongue, when a child is tongue-tied, care must be taken not to use the scissors too freely. All that is necessary is, standing behind the patient, to nick the anterior edge of the frænum with the scissors, and to tear with the finger-nail the remainder of the band. In this way hemorrhage, which is apt to be troublesome, is prevented.

In the removal of an elongated uvula after you have grasped the apex of the uvula, it is to be drawn forward and rendered tense before division. If it is simply grasped, and an attempt made to divide it in its normal position, it is not always an easy matter to effect the object desired. When it is rendered tense the operation is a very simple one. —*Edin. Med. Jour.*

NITRO-GLYCERIN IN THE COLD STAGE OF INTERMITTENT FEVER.

Dr. Charles Weil.—Articles on the therapeutic uses of nitro-glycerin, or glonoinum, have been quite numerous since its revival and application in disease, angina pectoris in particular, in which affection it has been used with remarkable success since its first employment by that distinguished investigator, Dr. William Murrel, of London. But in no article has the writer seen it recommended as a prompt and efficient remedial agent in the cold stage of intermittent fever, which it cuts short at once, as does morphine, for instance, or chloroform. I have employed it for this purpose in four different cases so far, with the desired result in each one, and without any unpleasant effect, aside from a little ringing or buzzing in the ears, which, as we all know, is part of the physiological action of this agent. The last case in which I used it was that of Mrs. L. F. G., a stout, married lady, twenty-six years of age. Under the greater part of the house in which she resides there was a pool of water, prior to the sewerage which has since been laid in the street. I was hastily summoned at about 7.30 o'clock in the morning of November 30th last, and found her covered with blankets, and with chattering teeth, in the cold stage of an intermittent fever. I gave her a hypodermic injection of morphine, which almost immediately cut the attack short. As she could not take quinine in any form, on account of an annoying eruption it would produce, I placed her on liquor potassii arsenitis, gtt. iv. *ter in die.* But this did not act as quinine would doubtless have done, for between 3 and 4 o'clock on the following afternoon she had another attack, which was again relieved by the morphine. After that she was free from all attacks until the 16th of last month, when I was again hastily summoned. I took with me my one per cent. solution of nitro-glycerin, and dissolving gtt. ii, in aquum xv, injected the whole into her arm. It acted as promptly and as efficiently as it did on the previous occasions, or as morphine did.

I would recommend, however, that only one drop be used, instead of two, unless the condition and nature of the patient would warrant more. I would also state that I greatly prefer the solution to the pills which some of the manufacturing chemists have placed on the market; the one per cent. solution in alcohol or ether being the most advisable.

My object in writing this brief article is to call attention to this additional property of glonoin, which the few cases mentioned justify me in claiming for it.—*Therapeutic Gazette.*

PNEUMONIA TREATED BY INTRAPARENCHYMATOUS INJECTIONS.

The *Lancet*, September 5th, says: Boldness may certainly be necessary for success even in the treatment of disease. But what shall we say of Lépine's argument in favor of the local treatment of fibrinous pneumonia by intra-parenchymatous injections? (*L'Union Medical*, August 22d.) If, says Lepine, an injection of a few cubic centimetres of a very weak aqueous solution of corrosive sublimate be made into the hepatized lung on the third or fourth day of the disease, in three or four places equidistant a few centimetres from one another, and preferably at the periphery of the lesion, with a view of preventing the extension of the disease, the following phenomena are observed: (1) At the seat of infection an immediate diminution of the crepitant rales and tubular breath sounds which are in part replaced by respiratory silence and some larger rales; (2) sometimes, later, a transient exacerbation of the temperature of body; (3) the next day a great improvement in the general conditions, and notably a precocious defervescence; and (4) a resolution which, to judge by the persistence of the "souffle," especially in the hepatized parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the intra-pulmonary injections in the doses employed (20 to 25 cubic centimetres of 1 in 40,000 solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than 3 to 4 centimetres, M. Lépine urges that he has not lost a single patient, and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphia to the solution. After the introduction of the sharp,

needle, and before the syringe is fitted on, a few drops of blood are allowed to escape ; the injection must not be delayed, or the needle will become plugged. When the needle is inserted into healthy lung or into tuberculous lung, it does not as a rule yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy dogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area, which was made up of blood and congestive œdema. The lesions were less marked with the 1 in 40,000 solution.

MASSIVE DOSES OF DIGITALIS IN LOBAR PNEUMONIA.

In the hands of M. Petrescu, Professor of Therapeutics at Bucharest, (*Progrès Médical*) the dosage of digitalis has been carried far beyond the limits formally recognised. The disease under treatment was lobar pneumonia, occurring in one lung or in both, in some cases uncomplicated, in others associated with pleurisy. Some of the cases do not seem to have been severe from the first ; the majority, however, were so. They were taken in hand, as a rule, either on the day of attack, or on the second day of the disease. It is also to be noted that the patients were soldiers in hospital, and therefore presumably men of good physique. The use of large doses of digitalis in pneumonia is not novel. M. Germain See has recommended that as large a quantity as seven grains of the leaves be administered per diem in such cases. Hirtz does not consider eleven to fifteen grains too much to employ during the same period, and gives the drug in a large quantity (100 parts) of sugar water, a tablespoonful of the mixture being taken hourly. M. Petrescu claims to have exceeded without hurtful effect, and with marked benefit to the patients, all former recorded measures. His material was selected from various drug stores, in order to avoid the risk of error dependent on the special quantities of any given sample and his results are briefly stated as follows, viz. :

1. The duration of the whole attack is said to be shortened, four days to one week.

2. Fever is strongly controlled and progressively diminished.

Sphymographic tracings show that the pulse is rapidly and decidedly slowed, and dicrotism disappears in great measure and finally altogether, by absorption of the primarily separate dicrotic wave into the descending slope of the main pulse-wave. A regular action of pulse is maintained, as is also the arterial tension from first to last, in apparently due proportion to the heart action and stage of the disease. Respirations diminished steadily and gradually in frequency. M. Petrescu accordingly maintains that the doses he employs represent the true therapeutic quantities of this drug in pneumonia ; that only when so given can its antiphlogistic action be relied upon ; and, further, that digitalis alone has been able to reduce the mortality from pneumonia to a minimum.— *The Practitioner.*

SOME POINTS IN THE PRACTICE OF ARTIFICIAL RESPIRATION IN CASES OF STILLBIRTH AND OF APPARENT DEATH AFTER TRACHEOTOMY.

Mr. Francis Henry Champneys, in an article in the April number of *The American Journal of the Medical Sciences*, in which this whole subject is carefully considered, thus sums up to the treatment :

Never hurry, it is not a question of seconds, and success depends upon a fine exercise of the judgment. Make a good diagnosis, first as to life or death ; secondly, as to the stage of asphyxia (if life is not extinct). If the child is macerated, it is obviously dead and past hope. If the heart beats, ever so slowly and feebly, it is not dead. If the heart is not beating, death is not certain, unless it can be proved to be inactive for some time. If the child is livid and not flabby, it will be probably come round, wipe out its mouth and pharynx, and rub it with a soft cloth down the spine, press gently on the cardiac region. If this produces no effect, inflate the lungs by the mouth, and then by Silvester's method. If air enter the lungs, well and good ; if not, try Schultze's method, or insert a catheter. On the first sign of muscular action, plunge the child into cold water, or into alternate hot and cold baths. Vary the treatment between occasional inflation of the lungs, artificial respiration, pressure over the cardiac region, baths, irritation down the spine according to the judgment; remembering what may be expected of each method, and that no one will suffice for all cases. Watch for signs of resuscitation, namely, improvement in the color, in movements, in cardiac pulsations, as described above. Never be content until the child breathes regularly, and appears to be continually improving.

DIABETES MELLITUS SUCCESSFULLY TREATED WITH BORACIC ACID.

F. A. Monckton reports, in the *Australian Medical Gazette* a case of diabetes mellitus cured by the use of this drug. He says, while pointing out the value of boracic acid as a diabetic remedy has only been proved in this one case, let me earnestly beg that those who have an opportunity of watching its effect will try it. When placed on the boracic acid the patient's urine had a specific gravity of 1.025. Seven grains of the acid were given three times a day, and at the end of ten weeks the specific gravity was 1.016 ; no sugar. He continues the drug, however, as it produces no unpleasant effects. No stringent dietary regulations were observed in this case.—*Medical World.*

A HINT ON THE TREATMENT OF RING-WORM.

Dr. R. W. Leftwich writes to the *Lancet*, February 6th, 1886: Last August a lady asked me to examine her nurse-maid's head. I did so, and found a well-marked patch of ringworm about an inch and a half in diameter. The mistress was naturally unwilling to expose the contagion to her children, who presented no sign of the disorder, and almost equally unwilling to part with the girl for a time. After some reflection I told her I thought the difficulty might be gotten over with only very slight risk to the children, and treated the case in the following way. Having cut the hair close to the scalp, all round the patch, I first painted it with an alcoholic solution of iodide of mercury—an old fashioned but excellent remedy, obtained by adding calomel to tincture of iodine and using the supernatant colorless fluid. As soon as the slight soreness it produced had passed off I applied an iodine plaster, obtained from a formula in Beasley's book and attributed to Roderburg, an ounce of the plaster containing a half a drachm of solid iodine. This spread on kid, was carefully applied to the patch, which it overlapped all round. At the end of a fortnight it was removed and the ringworm appeared practically cured. To make sure however, it was again painted with the above-mentioned solution and a fresh plaster applied for another fortnight. Upon being taking off, the whole surface of the patch was found covered with short hairs. No other patch has made its appearance upon the head or elsewhere, and not one of the three children with whom the patient was in daily and hourly contact, took the complaint. Possibly the plaster alone would have been sufficient, but I thought it safer to use the paint in addition, and I feared that if I used a more powerful plaster the irritation might tempt the patient to remove it. I might also have used a plaster containing oleate of mercury, but doubted whether it could be made sufficiently adhesive. The advantages of this mode of treatment are obvious enough, for by its means the risk of the disease being spread by actual contact, by means of caps and by the common use of hair-brushes, is reduced to a minimum. I find no allusion to this method in the ordinary works on the subject, and therefore infer that, if new, it is not widely known.

TUBERCULAR MENINGITIS CURED BY IODOFORM.

A Swedish physician, Dr. Emil Nelson alleges that he has cured an undoubted case of tubercular meningitis by frictions on the shaved scalp with iodoform ointment (1 to 10). The patient was a boy, aged 8, whose mother had a family history of phthisis, and four of whose brothers and sisters had died from tubercular meningitis. The symptoms in this child's case were similar to theirs—headache, torpor, convulsions, strabismus, and pyrexia. He was at first treated with calomel and iodide of potassium, but did not improve; and, after having been under treatment a week, became distinctly worse, being unable to take food or medicine. The pallor of the face, which had pre-existed, gave way to flushes of the cheeks. The child threw himself out of bed, and presented severe clonic spasms of the limbs and of the facial muscles. The head was then shaved, and iodoform ointment rubbed in, an oil-skin cap being put on. The friction was repeated three or four times in the day, and the next day there was a decrease in the convulsive movements, the sleep was calmer, and spasmodic contractions, which had previously been excited by the slightest noise, now ceased to be so. Consciousness shortly afterward returned, and the child's face became of a more natural color. This, however, was accompanied by a severe coryza, redness of the lips, and irritable cough, the breath smelling strongly of iodoform. The ointment was discontinued, and syrup of iodide of iron given. The unpleasant symptoms rapidly disappeared, and the child was soon running about in good health.—*British Medical Journal.—Md. Med. Journal.*

THE PREVENTION OF MAMMARY ABSCESS.

Philip Miall, Consulting Surgeon to the Bradford Infirmary, says in the *British Medical Journal*: A method of treating inflamed breast after delivery may be worth notice in connection with Dr. Edis's paper on the use of support by a bandage or towel. Dr. Edis appears to use his method after every delivery, and, by beginning it before lactation is established, assures success; but one occasionally sees cases where abscess is on the point of forming, either from neglect or injudicious treatment, and where, consequently, something more is required.

I have repeatedly seen a hot, heavy inflamed breast, with redness of skin, throbbing, and deep-seated pain, the pulse being 120 in the minute, yet these symptoms have disappeared in the course of a few hours under fomentation with hot water and ammonia. An ounce of carbonate of ammonia is dissolved in a pint of boiling water, and, when solution is affected, the temperature will scarcely be too high for fomentation with cloths dipped in the liquid. These must be assiduously applied for half an hour at least, and repeated two or three hours later if necessary. It is well to protect the nipples, though I have never known them to be injured. Relief is immediate, and more than three applications are seldom required.

Unless applied too late, or improperly, or some foolish rubbing or drawing with the breast-pump be used, contrary to orders, this remedy may be thoroughly relied on. I am indebted for it to Mr. Douglas of Banbury; and as it has had a trial of thirty years in my hands, I can speak of it with some confidence.

DOVER'S POWDER AND ITS MODIFICATIONS.

In the *Asclepiad*, 1885, Dr. Richardson speaks of Dover's powder: "In many cases there is no anodyne equal to Dover's powder, no other such a soporific febrifuge. If I could envy any one as a therapeutist, it would be the old physician who originally had the happy thought of blending astringent opium with relaxant ipecacuanha, and both with a diuretic and laxative. I suspect that Dover's name, though so little is known of the man himself, is more frequently quoted than that of any other physician. It is very often a good plan to modify Dover's powder by employing other salines than sulphate of potassa. The true Dover's powder contains nitrate of potassa as well as sulphate, four grains of each; and it often seems to me reasonable to revert to this form, as the nitrate of potassa in small doses is so good a diuretic. I also often venture to use other modifications with advantage. In acute rheumatic fever I usually substitute sodium salicylate for the potash salts; in gout, bicarbonate of soda; in remittent febrile cases, two grains of quinine with five of sodium salicylate; in tonsillitis and other febrile throat-affections, chlorate of potassa. It would surely be worth the time and skill of one of our scientific pharmaceutical brethren to prepare and bring out a series of Dover's powders in these modified forms."

PRURITUS OF WOMEN.—LOCAL TREATMENT.

All acquainted with the incessant suffering which some women undergo from pruritus at the period of the menopause must be very desirous of being made acquainted with a prompt remedy for so distressing an affection. Whether it arise from the presence of prurigo, urticaria, eczema, herpes; or whether it exists without any eruption at all, it is alike difficult to allay, as the great number of remedies which have been proposed testifies. Of these veratria is by far the most efficacious. When the pruritus is localised at groins, arm-pits, walls of the abdomen, or behind the ears, gentle friction night and morning with an ointment, consisting of thirty parts of lard and a quarter of a part of veratria, usually gives relief. When the pruritus is generalised, the internal administration of the veratria is preferable. Two centigrammes should be made into ten pills with liquorice powder, of which from two to six should be taken daily, either half an hour before, or three hours after meals. Only one should be taken at a time, an additional one being given each successive day until the maximum of six (three milligrammes) is attained.—*Dr. Chévno in Le Progres Medical.—Med Times.*

HYPODERMIC INJECTIONS OF COLD WATER IN SCIATICA.

Dr. D. H. Lewis, of Lone Pine, Pa., writes to the *New York Med. Record* for January 23, 1886, that he was consulted by a man 60 years of age, who was suffering greatly from sciatica. He had been treated for the past eight weeks by two physicians, and had run through the entire list of anti-neuralgic remedies. Being desirous of trying something which was at least new to the patient, Dr. Lewis determined to employ hypodermic medication, and having no drug handy which he cared to use, he filled the syringe with cold water and injected the fluid deep down behind the trochanter. The following day the patient returned and said he was feeling much better. The injections were accordingly repeated every third or fourth day for a period of three weeks, by the end of which time a complete cure was obtained. The writer has since treated a number of cases of sciatica in the same way, with equally gratifying results. He thinks that possibly many of those cases which have been reported as cured by the injection of certain drugs, such as cocaine, might have terminated in an equally favorable manner had simply cold water been used.

HOT WATER IN ACUTE PROSTATITIS.

In *Lyon Medical* we find a recommendation of the use of hot water in cases of acute-prostatitis. Two cases in point are cited, in which the violent inflammatory phenomena were subdued within a few days.

In the first instance sudden dysuria became established in the course of a gonorrhea. An enormous tumefaction of the prostate was found on palpation per rectum. A large swelling with smooth surfaces, of considerable hardness and pulsating under the examining finger was made out. The suffering was intense. At once compresses wrung out of hot water were applied to the perineum and hot enemata were given and order retained. The pain, the vesical and rectal tenesmus and dysuria became lessened at once. The swelling subsided and recovery was perfected at the end of the third day.

In the second case the same success followed rectal injections of hot water that were made at night and in the morning, together with hot water compresses applied to the perineum throughout the day.

VENESECTION.

The critical time for relief of an actively congested or inflamed brain, or lung, is sometimes allowed to pass for want of a ready and certain method of opening a vein. A blunt-pointed and dull pocket-knife may be used in such an emergency. Having first put on the usual constricting bandage, to distend the veins, transfix the most prominent vein with a needle. Thus held securely, it is easy, even with a dull knife, to cut a valvular incision into the vein so that the blood will flow freely. (Levis.) A piece of broken glass would suggest itself in some cases.

MODIFICATION OF DOVER'S POWDER.

Dr. B. W. Richardson, in the *Asclepiad*, suggests some useful modifications in the preparation of Dover's powder, for use in certain diseases. He recommends the substitution of sodium salicylate for the potash salt, in rheumatic fever; soda bicarbonate, in gout; quinine and its salicylate in infantile remittents; and potass. chlorate in tonsillitis and febrile throat affections. The Dover's powder contains both nitrate and sulphate of potash.—*Medical World.*

THE CANADA MEDICAL RECORD

A Monthly Journal of Medicine and Surgery.

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MONTREAL MAY, 1886.

MONTREAL GENERAL HOSPITAL.

Dr. Godfrey having resigned from the Indoor Surgical Staff, and Dr. Simpson from the Staff of Assistant Surgeons, both were elected to the Consulting Staff, the former on the 12th of May, the latter on the 18th of May. Dr. Godfrey's vacancy it was well understood would be filled by Dr. Bell, (from the staff of Assistant Surgeon) being elected thereto. Two vacancies were thus created on the out-door staff for which McGill College put forward as candidates, Dr. R. J. B. Howard and Dr. Wm. Sutherland, and Bishop's College Dr. A. Lapthorn Smith. The two former gentlemen were elected by large majorities, but Dr. Smith polled a most respectable vote, which we have no doubt will show a considerable increase when another vacancy occurs. The election, which took place in Nordheimer's Hall on the 20th ult., was a sorry exhibition of mismanagement, no attempt, so far as we could see, being made to prevent irregular voting. If a year ago it was thought necessary to mark off the name of each governor as he voted, surely this year, in a public hall, when other than governors could and were present, some more careful method than simply passing around a hat to receive ballots should have been resorted to. After the collection had been made, and the scrutineers were busy at work, ballots by the half dozen were passed up in a most singular manner on to the platform, and conveyed in to the scrutineers.

We do not for an instant insinuate that any one voted who had not the right to do so, but there was nothing to prevent its being done. It was not till the chairman's attention was called to the fact that the ballot had not been declared closed that he took the steps necessary to do so. Now this is all wrong; either the ballot should be closed the moment the collection of votes is made, or it should be understood beforehand that the ballot would remain open up to a certain hour. Once before, and that not many years ago, a candidate had good right to complain of injustice from a somewhat similar incident. Then, when the collection had been made, and the votes counted, a tie was the result, and it was subsequent votes taken in that in all probability changed the result of the election. The voting at every election should be conducted in a similar manner, and not in the fashion that may at the moment strike those responsible for it. Then the voting papers were a sorry exhibition of either carelessness or want of knowledge, for the various tickets were many of them wrong. Some contained names which should not have been on them, while others that should have been on, were absent. The chairman made an explanation, so as to have the errors corrected, but very serious and unfortunate results might have occurred. The question asked by Dr. Campbell at the meeting was a very pertinent one, and we are sorry that it was left to the chairman to make reply. Dr. Campbell inquired if the gentlemen (medical) who less than a year ago had so bitterly and unpleasantly opposed the claim of the assistant surgeons and physicians to election to the position of consultants after twelve years' service, had really been permanently converted, or whether, in promising Dr. Simpson not to oppose his election to the Consulting Staff (Dr. S. being an assistant surgeon, and only having served the twelve years), they had simply done so so as to serve a second vacancy. In other words, was this action of theirs a political move for the time. There were those present who could have answered this question much more satisfactorily than did the chairman, who said all he knew was that Dr. Simpson had resigned and that his promotion to the consulting staff

had not been opposed, but these gentlemen kept silence. We also think it our duty to protest against any candidate or candidates issuing a ticket somewhat like what is officially issued by the committee of management on the day of election, unless it contains the names of *all* the candidates. Such political trickery is unworthy of those who twice lately have been guilty of it. Other questionable means were made use of at this election, which we have heard many of the governors condemn.

PROPOSED CHANGES IN THE QUEBEC COLLEGE OF PHYSICIANS AND SURGEONS.

We would draw the particular attention of the profession in the Province of Quebec to the report which was presented to the Board of Governors of the College of Physicians and Surgeons of Quebec at their last semi-annual meeting, held in Montreal on the 12th of May. This report will be found in full in this number of the RECORD, and it will be brought forward for discussion at the approaching tri-annual meeting of the College. There can be no question that the profession throughout the Province are not in full and active sympathy with the College. They feel that it has been controlled by a few, who, gathering together a large number of proxies, make their own list of Governors for each district and elect them. In this way they claim the Board has consisted, not so much of representatives for each district, as of representatives from each district bound to follow and endorse the action of men to whom they owe their position. We believe the profession are right, and the sooner they take the election in their own hands the better. The method of election suggested is simple and easily carried out. It is a question, however, to which we draw attention, whether it is wise to continue the districts, as named in the report, which are the districts as now recognized, or whether we should embrace all the judicial districts in the Province. Whatever may be suggested in this way, there must be no attempt to increase the number of members on the Board, which are already quite numerous enough. Indeed, if any change can be made, it should be in the direction of reducing the number of Governors. The question of a Central Board of Examiners—as in Ontario—would have been endorsed at least seven years ago, had not Laval University positively refused to come into line. She has since recognized the error she then made, and is now strongly in its favor. All the schools being now supporters of the scheme, we hope to see it soon an accomplished fact. The fact of the two languages spoken in this Province, and which of course had to be taken into consideration by the committee, was, we understand, a source of some difficulty in arranging details. A French and an English Board was out of the question, for each might, and very possibly would, claim superiority of their examinations. The suggestion of the committee to have double examiners, one in English and one French, and both responsible for the examination, although somewhat expensive, seems to us to be the only way of meeting the difficulty. The whole question will be brought forward at the tri-annual meeting of the College, which takes place in Montreal on the 14th of July next. In the meantime we ask our readers residing in the Province of Quebec to read the report carefully, and to come to the meeting prepared to discuss the various points raised by it.

At the meeting of the International Medical Congress, in Copenhagen, an estimate of the number of physicians in the entire world was made. The number was 189,650.

In the Lying-in-Hospital of Vienna, 9,000 women are confined annually. The rate of mortality is one-half per cent. for the mothers and 15 per cent. for children.

Prof. Turner, of Edinburgh University Medical Faculty, has been Knighted by the Queen.

ALEXANDER'S OPERATION.

During the past twenty years immense advances have been made in the treatment of diseases peculiar to women. Operations have been performed new to surgery, resulting in increased longevity and at the same time bringing comfort and happiness to many a woman who otherwise would drag out a miserable and shortened existence. The renown which certain of the specialists in this department have deservedly obtained and the prominence which their results have given to the subject has induced a desire in many to distinguish themselves by having their names attached to some new and otherwise original operation. The mind is burdened by being obliged to remember the names attached to operations, and though it is but right that the surgeon who first performs any operation should receive just recognition still it may be fair-

ly questioned whether it would not be better to know such operations under that name which would best convey its meaning to those interested. In proof of this many of our readers will no doubt ask themselves what Alexander's operation consists of. Upon reflection they may be able to recall having read in late journals what it means, and probably criticized the utility of its performance. Like the "Sigualtian" operation it will in all likelihood not long survive its birth, for it is a procedure which does not commend itself to the anatomist, and the *questionable* success which has been claimed for it is more than counterbalanced by the danger attending its performance. A western journal lately records one of these successful cases which the writer hastens to publish. The latter however in concluding his article naivcly adds that his patient is still wearing a pessary. The follow ing timely remarks 'of M. Pagot, made at a late meeting of the Gynecological Society of Paris during a discussion upon the operation for shortening the round ligament will therefore meet with the approval of the majority conversant with the conditions sought to be relieved.

"When an operation is performed, of which death is a possible result, I am the first to approve of it, provided it has for its object the saving of a life absolutely in danger. I can understand how a surgeon may attempt the radical cure of a hernia, since hernia may, at any given moment, become a cause of death. But to-day such operations are resorted to under the pretext of correcting a displacement of the womb. Yet it would probably be impossible to cite a case where a woman died because she had a uterine displacement. It is true that in a pregnant woman retroversion may, if not remedied, produce death. But it is proposed, when the womb is empty, to expose the patient to this grave operation. While I accept extreme measures, undertaken to save a woman who has a uterine tumor, or an ovarian cyst, which may destroy life in a short time, I indignantly protest against dangerous operations undertaken for the relief of conditions which in themselves do not imperil life. Uterine displacements of themselves are insignificant, and produce no symptoms unless associated with uterine catarrh or other lesions of the womb. I believe that if the surgeon would fully and honestly explain to women the dangers of this operation, not one would be found willing to expose herself to so serious risks."

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

The semi-annual meeting of the Governors of the College took place in Montreal on the 12th of May. The attendance was good. Dr. Lemieux, the President, occupied the chair. A resolution of condolence on the death of Dr. Marsden, one of the oldest Governors of the College, was moved by the Hon. Dr. Robitaille (ex-Lieut-Governor of the Province of Quebec) and seconded by Dr. R. P. Howard. It was carried unanimously, and the Secretary was ordered to send a copy of the resolution to Mrs. Marsden. The reports of the assessors of the various medical schools were read and adopted. The report from the Board of Preliminary Examiners of the examination held on the 6th and 7th of May was not ready for presentation, and the Secretary for Montreal announced that this was due to three causes—1st. The death of one of the examiners, the late Prof. Miller of Quebec, thus throwing additional work on the rest; 2nd. The unusually large number of candidates; and 3rd. The fact that some difficulty had been caused by one of the candidates getting possession of some of the examination papers. On motion a committee was named to consult with the Preliminary Examiners on the subject, and to report at a special meeting of the Governors, which the President was authorized to call, to be held in Montreal on Tuesday, the 13th July, the day preceding the tri-annual meeting of the College; the report of the Preliminary Board to be presented at this meeting. A number of graduates presented diplomas from universities of this Province and received their licenses. Two gentlemen, Dr. Yeats, of Dunham, and Dr. Canfield, of Coaticooke, qualified on British qualifications. The most important business presented was the report of the committee appointed at the last meeting to consider the question of changing the method of electing the Governors of the College, as well as to consider the advisability of establishing a Central Board for the examination of all candidates, as in Ontario; also to suggest such amendments to the Medical Act as they might think desirable. The following is the report of the committee:—

The Committee appointed at the last semi-annual meeting of the College to consider the amendments necessary to put into force the report of the Committee on the Financial condition of the College, also to consider the suggestions made at the last Tri-annual meeting, with regard to the manner of electing the Governors, as well as the

notice of motion given by Dr. L. LaRue, regarding the establishment of a Central Board of Examiners, met in the City of Montreal on the 16th of February 1886. There was present Drs. Lemieux (president) Simard, Guay, L. LaRue, Lachapelle, Austin, Hingston and Campbell.

Several hours were spent in discussion when the Committee declared it was in favor of the College, having a Central Board of Examiners.

It also came to the conclusion to suggest that the following subjects be made part of the Preliminary examination, and that they be made obligatory—Moral and Intellectual Philosophy—Physics, Mineralogy, Geology, Astronomy and Botany.

Time for adjourning having arrived. It was moved by Dr. Simard—seconded by Dr. Austin, That a Sub-committee, composed of Drs. Geo. Ross, Hingston, Lachapelle, Leprohon and F. W. Campbell be named to complete the work of this Committee, concerning the alterations to be made in the Medical Act, all in conformity with the resolution passed at the last Semi-annual meeting of the Board. Carried.

The Committee adjourned *sine die*.

The Sub-Committee appointed by the general Committee, met on February 27th, March 1, 7, 10 and 15, also on the 7th of May.

They beg leave to submit the following as the result of their deliberations :—

CENTRAL BOARD OF EXAMINERS.

1. The Board shall be known as the Central Board of Examiners, and shall consist of two examiners on each subject, one English and the other French. Both shall assist at the examinations, but the immediate conduct of the same, shall be by the examiner speaking the language to which the candidate belongs.

2. The Central Board of Examiners shall consist of a representative from each medical school now recognised by the Medical Act, and of an equal number not connected with any medical school.

3. The Central Board of Examiners to be appointed annually by the Provincial Medical Board, the names being submitted by a nominating committee, which nominating committee shall be named by the President, subject always to the revision of the Medical Board. It shall consist of one representative from each Medical School and an equal number selected from the members of the Board not connected with any Medical School. In case of a vacancy occurring on the Central Board of Examiners, either by death, resignation or removal, the said vacancy shall be filled by the President of the College.

The members of the Central Board of Examiners may or may not be chosen from among the members of the Provincial Medical Board.

The Central Board of Examiners shall commence their examinations on the second Tuesday in April, and they shall be held at Montreal or Quebec, as may be decided by By-law of the Board.

The fee to be paid to the members of the Central Board of Examiners, shall be $10 per day, and mileage at the rate of five cents per mile.

The professional examination shall be divided into Primary and Final. The examinations shall the written and oral:

FEES.

Fee for Primary Examination	$10.00
" Final "	10.00
" Diploma of Membership.....	25.00

PRELIMINARY EXAMINATION.

The Preliminary examination shall be held in the first Wednesday in July, at Quebec or Montreal, as may be decided by a By-law (the suggestion of the General Committee of additions to the Preliminary examinations is not considered wise. The sub-committee are of opinion that no change should be made in the Preliminary examination.)

Graduates in Arts of any University in Her Majesty's Dominions, to be exempt from passing the Preliminary examination.

OBJECTION.

Dr. Hingston objected to the above clause on the ground, that it was incomplete, and moved the following addition.

"That any student who shall have attended a complete course of classical studies, and shall furnish proof of having passed an examination equivalent to an examination in Arts shall also be exempt from the Preliminary examination.

DATE OF PRELIMINARY EXAMINATION.

The Preliminary examination for admission to the study of Medicine shall be held on the first Wednesday in July.

BOARD OF GOVERNORS.

The Board of Governors shall meet annually on the second Wednesday in July, the place of meeting to be definitely settled by a by-law of the Board. The sub-committee think it advisable that a permanent locality for this meeting be selected.

METHOD OF ELECTION OF GOVERNORS.

That each District shall after these amendments become law, elect their own representatives.

The Registrar shall two months previous to the date of election, furnish the Secretary at Quebec, a list of all those qualified to vote in the City and District of Quebec, and District of Three Rivers; and to the Secretary in Montreal a list of those qualified to vote in the City and District of Montreal, and the District of St. Francis. If there be only one Secretary, then to the person holding that office. One month previous to the election he shall send out printed ballot papers, which shall be signed by the voter, sealed and returned within two weeks, to the Secretary whose signatures is on the Ballot paper who upon receipt of the same, shall place them unopened in a Ballot Box, which shall be placed locked, in the hands of the Secretary, and which shall only be opened in the presence of Scrutineers named who shall count the Ballots, and declare who has received the majority of votes.

A printed list giving the result of the Ballot, shall immediately be posted to each voter.

The election of Governors shall take place on the first Wednesday in June.

The Scrutinecrs shall be named by the Presiding officer, at the meeting of the Board, held preceding the tri-annual election.

The majority of the sub-committee are of the opinion, that the amendments regarding the Central Board of Examiners, shall only apply to those who enter upon the study of Medicine, after the 1st of May 1886. A minority are of opinion that they should come into operation at once.

The sub-committee also discussed and agreed upon certain amendments to the Medical Act, which amendments have in view the facilitation of legal process in the courts.

Copies of this report were ordered to be printed and sent to every member of the College, and its consideration was relegated to the tri-annual meeting of the College, which takes place in Montreal on the 14th of July next.

PERSONAL.

Dr. Chandler, C.M., M.D., and Gold Medalist Bishop's College, 1880, is in practice in Boston, devoting his attention entirely to diseases of the eye. He has been elected one of the surgeons to the Boston Eye and Ear Infirmary, which is said to give the best opthalmic and aural clinics outside of Moorfields, London. Dr. Chandler is rapidly rising in the special branch to which he is directing his energy, and promises before long to rank as one of Boston's most reliable specialists.

Dr. Bishops, C.M., M.D., and Gold Medalist Bishop's College, 1882, is also practicing in Boston. His office is in the Hoffman House. He is doing well. He has for some time held the position of Surgeon to the American Mutual Accident Association for Boston and vicinity. This occupies much of his time, and is considered a very valuable position.

Dr. Wolfred Nelson (M.D., Bishop's College, 1872) has for some time been Medical Inspector for South America for the New York Life Insurance Company. He was in New York early this month for a few days. His many friends will be glad to know that his health is remarkably good.

Dr. Godfrey has resigned his position of Surgeon to the Montreal General Hospital, and been elected on the Consulting Staff. Dr. Bell has been elected to fill the vacancy.

Dr. Simpson, Assistant Surgeon to the Montreal General Hospital, has, after twelve years' service, been promoted to the Consulting Staff.

Drs. Sutherland and R. J. B. Howard have been elected Assistant Surgeons to the Montreal General Hospital.

Drs. Armstrong, Wood and McConnell, professors in the Medical Faculty of Bishop's College, sailed for Europe in the Alaska from New York on the 19th of May.

Dr. Elder (M.D., McGill College, 1885) has commenced practice in Huntingdon, P.Q.

Dr. A. A. Browne has resigned the professorship of obstetrics in McGill University.

We are sure that the many friends of Dr. J. C. Cameron, who last year heard with regret of the serious symptoms which compelled him to resign the chair of Obstetrics and Diseases of Chidlren in

Bishop's College, as well as all the active work in connection with this Journal, will learn with sincere pleasure that he has so far recovered as to justify his accepting the Professorship of Obstetrics in McGill College, rendered vacant by the resignation of Dr. Arthur A. Browne.

LOCAL AND GENERAL.

Montreal appears to be rapidly assuming the airs and graces of a "specialist" centre, and as spring poetry is now in order I quote, without apology, a portion of a clever satire from the organ of the New York Post Graduate Medical School—*The Quarterly Bulletin*, which must be read by that secondary consideration, the general practitioner to be appreciated.

"'Mid sulphurous fumes, in antiseptics rich
Enough to please our Peters, cure the itch,
Great Satan sat, dark frowns upon his face,
As when one finds another's got his case.
Fiercely he mutters: 'Twenty doctors more
Within two days have come within my door,
And now at last, the news quite strikes me dumb,
The porter says some Specialists have come.
Should old ambitions once these fellows seize,
If they put out their signs, take in their fees,
Sure all my toils of little use would be,
Then I must go, this is no place for me.'
The Demon rose, and shook from off his coat.
The yellow films of *U.S. Sulphur lot.*,
Uttered a cough which all Hell's regions racked,
And ordered out his baggage to be packed.
'I'll up to earth,' he said, 'for I must know
Why doctors are now rattled on me so.'
Out into space he shot, a curious sight,
The Devil bent on setting things aright."

Knowing it would be of little use to try to keep the Old World Doctors out of the inferno Satan visits first Boston, then Philadelphia, and finally New York, about which last place he says:

"For sure unless all stories lie
The doctors there are all much worse than I."

On his way thither he is blown up by an explosion, which inflicts a great variety of injuries:

"A much bruised party rose from up the ground,
He'd every ill that's in the body found—
A spine concussed, a fractured bone or two,
A dozen sprains, his skin quite black and blue,
Disordered function of each inner part,
Uneasy stomach, damaged lungs and heart;
But sweet philosophy some comforts bore,
"I don't mind" he said, "I've fallen before,"
And sure the fates do in my cause enlist
To fit me for each New York specialist."

Then he visits them all, the surgeons, the orthopœdists, the oculists

"Who ply the art that's based on cocaine,"
The disciples of Neuropathy.
"So great her science so small her art"

And, to conclude, the "womb doctors" receive the following attention:

Besides he found they'd stolen his own wares,
And caught their victims all in painful snares;
Some pleasures still in Satan's lot prevail,
For he at least unquestionably is male,
For him no gynecologist could seek
Within persuasive specula to peek, or, with some
learned name his troubles labelled,
Like Parliamentary motions, have him tabled.
I'm sure that once the Devil stopped and prayed,
'Twas when he found he could not be spayed.
O, gentle Art, I'm sure I am not blind
To all the good you've done for womankind,
But once 'twas woman's part to cut and sew
While now to cut and sew her parts you go.
Too oft perhaps might it not be a gain
If you made less of womb and more of brain?"

The New York *Medical Record* "buds and blooms and blushes" in the following truly vernal style.

"Little drops of water,
Little grains of milk,
Make the little doctors
Of the homœopathic ilk

Precious little bottles,
Sitting in a row,
Filled with potent liquid
Known as H_2O."

A drop of Mother Tincture,
Humble though it be,
Makes the tenth dilution
When poured into the sea.

Of all the gulls delusive
The greatest is to know
Where lies the healing power.
In a drop of H_2O."

This also:

The Landlords who bloom in the Spring—
The doctor who hunts in the Spring, tra la,
For a bright pleasant office up town,
Finds it rather a difficult thing, tra la
To get a landlord on a string, tra la,
And makes his rent figure come down.
And that's what I mean when I say or I sing
To the devil with landlords who bloom in the Spring
Tra la, tra la, tra la, tra la,
To the devil with landlords in Spring.

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CLINICAL LECTURE.

Delivered at the Montreal General Hospital February 23rd, 1886.

BY FRANCIS W. CAMPBELL, A.M., M.D., L.R.C.P.L.
Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

LEAD COLIC.

The two patients which I now present to you, have been twice before you in the Out-door Department of the hospital, but, owing to the number of patients who are continually seeking relief, I was able to make but a few very casual observations upon the disease under which they are suffering; and also because I desired to keep them and bring them before you to-day, when I would have an opportunity of going more fully into their history, which, as taken by my clinical clerk, Mr. Punchard, is as follows:

I. Leoupt has been a painter now for eleven years, has had the present symptoms for the last three years. His work is chiefly indoor; has used all kinds of paints and white lead frequently. He is not given to drink steadily, but occasionally goes on a spree. He first found his appetite failing, and general debility, eyesight poor, and unable to hold his brush for any length of time. General twitching of the facial muscles, a blue line surrounding each tooth—more marked in upper than lower jaw. His bowels are more or less constipated, complains of thirst. Skin of a pale sickly hue, pain in the stomach and also in the limbs of a neuralgic character.

Ulric Beauchamp has been a painter for fifteen years, has been troubled with present symptoms for a month and a half, has also used all kinds of paints, and constantly white lead. His appetite is poor, has been used to drinking beer at his meals, has always been careful to wash his hands before eating. He is now principally troubled with weakness of his hands, pain in his limbs and constipation, also complains of thirst, skin of a pale hue, and a marked blue line around the gums, his principal trouble is in his hands.

The disease is known under a variety of names 1. Saturnino. 2. Painter's Colic. 3. Plumbers' Colic. 4. Colica Pictonum. 5. Rachialgia. 6. Dry belly ache. It is met with in men who are employed working in lead. It is generally developed gradually. As a rule there are prodromic symptoms, such as pallor, often a yellow condition of the skin, peculiar sweet fœtor from breath and a sweetish taste in the mouth, loss of appetite, constipation, wandering pains in limbs, partial, emaciation and muscular debility. Then there comes a slight pain in the abdomen, which gradually increases in intensity. This pain may be in the epigastrium or hypogastrum, but most often it is close to the umbillicus. Rarely it extends over the whole abdomen, and at times shoots into the back. Its character is sometimes dull and aching, at others it is sharp, acute, lancinating. In severe cases the pain is extreme, causing the patient to groan and cry out. The abdomen is generally retracted, sometimes so much so that the bodies of the vertebræ can be seen through the abdominal parietes. The retraction is regular as a rule, giving the abdomen a boat-shaped look. At rare times the retraction is irregular, and the abdomen may be the reverse, *i.e.*, swollen. Pres-

sure on the abdomen generally relieves the pain, patients know this, and often lie on their belly, with a folded pillow or some such substance beneath them. Constipation is usually pronounced, and when a motion occurs the dejections are hard lumps or scybala. Nausea, hiccough and eructations of gas are common. Urine is scanty, and it is passed with great difficulty. The pain may be paroxysmal, the patient in the interval being free from it. Usually, however, it is always present, but the exacerbations are well marked, at times there is tenesmus. Pulse is abnormally slow, sometimes about 35 per minute, and is often irregular, in frequency, not intermittent. It is fuller and harder, as a rule, than it is in health. There is not any rise in temperature in the majority of cases; in a few an insignificant rise takes place. There are various disorders of sensation, hyperæsthesia, numbness, formnication, a feeling of pins and needles, neuralgic pains in both the upper and lower extremities, headache, amaurosis, this often is double, and comes on sometimes suddenly, sometimes gradually.

There are various motor disturbances, tremors, epileptiform convulsions, local paralysis of the extensors of the forearm, generally the right, sometimes both. This gives to the hand a very peculiar appearance, the wrist drop, as it is called. Rarely the muscles of the upper and lower extremities are affected and rapidly become atrophied. If the gums be examined nearly always a blue line will be found at the junction of them with the teeth. This line, gentlemen, is well illustrated in the two patients now before us, as is also another sign—a brown or black incrustation on the teeth with a tendency to rapid decay. This blue line is said to be due to the formation of the sulphuret of lead, sulphuretted Hydrogen being evolved from the decomposing particles of food, remaining between the teeth, and beneath the margin of the gums. The disease, if left to itself, may end in a few days or weeks. If the patient remains exposed to the source from which the lead comes it may continue an indefinite time. In itself it is not a fatal disease, but if the amount of lead in the system be large there at times develops an affection of the brain which is known as Encephalopathia Saturnina. This complication is generally met with among laborers whose work favors a copious absorption of the poison. It is marked by intense headache, amaurosis, delirium, sometimes maniacal, sometimes melancholia, epileptic convulsions,—these being often so frequent as to be the cause of death.

The introduction of lead into the system may be through the lungs, stomach, mucus membrane and the skin. Certain occupations involve the inhalation of lead. Those employed in the manufacture of lead, paints, and painters are the most exposed. Paper stainers, color grinders, card glazers and plumbers are also exposed. The disease has been known to result from sleeping in a newly-painted room. Water distributed in lead pipes is often the vehicle through which it is introduced into the system. One of the worst cases I ever met with was in the person of a fellow student, who for some time every morning drank soda water drawn from a fountain whose pipes were of lead. He was very ill, narrowly escaped death, but eventually made a good recovery. Lead is sometimes a component of the colors used in decorating confectionery, though I think now most confectioners use vegetable coloring. Articles enclosed in lead foil may also be contaminated.

Diagnosis.—The diagnosis of this disease is not at all difficult. The presence of a few of the prominent symptoms in a person exposed to lead will at once excite suspicion.

Treatment.—Is palliative and curative. Relieve pain by morphia, by mouth, bowel or hypodermically—warm fomentations to the bowels followed by hot linseed poultices over abdomen on which tincture of opium has been sprinkled. A mixture of chloroform and laudanum applied night and morning to the bowels is said to be very effectual in giving relief. Have the bowels move freely, and as they are constipated active cathartics are necessary; the most active advised is croton oil in a dose of 2 drops; compound powder of jalup is useful; so also is sulphate of magnesia in doses of ℥j. every 2 hours in ½ pint of water till free dejections are obtained. Purgatives are useful in removing from the system the lead contained in the contents of the bowels. A drachm of dilute sulphuric acid in a quart of sweetened water should be taken in the 24 hours. It is advised that this kind of lemonade might be used at meals by lead workers, as at this period much lead is thought to be introduced into the system. It would form an insoluble compound with any lead entering the stomach. Its efforts for good are said to have been tried and not found wanting at the large lead works at Birmingham, England. The great remedy for getting the metal out of the system, which is the object to be aimed at, is the administration of iodide of potassium, a soluable iodide of lead being formed, which passes away

in the urine and other excretions. Its use is not empirical, for cases of lead poisoning under treatment by iodide of potash have shown lead in the urine, when it was not present, previous to the administration of the remedy. Clinical observation has also given good proof of its efficacy, as I hope it will in the cases now before you. It is best to begin with a minimum dose of 5 grs. 3 times a day. It should be gradually pushed till 20 grs. three times a day is taken, if the system will stand it,—as it very often will. The sulphurated or sulphur bath is useful. It is made by putting ℥ iv. of the sulphuret of potassium to 30 gallons of water in a wooden tub. The lead appears on the skin as dark discolorations, which can be removed by a brush—change of occupation may be necessary; for the paralysis of the extensors, electricity in its different forms, such as local faradization and galvanization. Strychnia is very useful in this form of paralysis. The powerful effect which strychnia has upon the excitability of the nervous system, and the admirable results which have followed its use in other forms of paralysis, forces itself on our attention here. It may be employed hypodermically. It is a drug, however, which must be given with great caution, and its effects watched, for its efforts are various on different persons.

Meetings.

MEDICO CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, March 19, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Excision of the Elbow for Dislocation and Fracture.—Dr. Roddick exhibited a man on whom he had recently performed excision of the right elbow—one of six cases of excision of this joint operated on during the winter session. He wished to show this case just now as the man was about to leave the city. The operation had been performed for dislocation backwards, with fracture of the olecranon, and both radius and ulna, of three months' standing. The ordinary straight incision had been employed, and union by first intention had followed. The result was most satisfactory, the man having all the original movements of the joint. The arm was rapidly developing, so that already he could wield his hammer, being a tradesman.

Diseased Testicles.—Dr. Roddick also exhibited two specimens of diseased testicle—one of sarcoma, sent by Dr. Bryson of Port Arthur (no history); the other of tubercular disease, which he had that day removed from a young man aged 25. The latter noticed an enlargement of the left testicle about a year ago, which suppurated and burst, and a sinus still remains. The right one began to swell some three months ago, and at the time of admission to hospital was very much enlarged and the seat of extensive suppuration. It was removed, and found to be very much diseased, the entire epididymis being occupied by a large abscess. No history of gonorrhœa or traumatism, but a distant family history of tubercle.

Interstitial and Submucous Myoma.—Dr. Wm. Gardner exhibited the specimen and related the case. The tumor was of the size of a fœtal head. The patient, unmarried, never pregnant, aged 33, had been several years under observation, suffering from severe pain and excessive tenderness of the left iliac region and from profuse menstruation, lasting from eight to fourteen days. On one occasion, three years previous to operation, menses ceased for several months, and epistaxis became frequent and profuse. For years the patient had begged for operation. This was undertaken a week ago, the intention being to remove the appendages. The left ovary and tube were easily found, and ligatured, but the right appendages could not be found until the incision was extended and the tumor forced out. They were then found on the floor of the pelvis, and so sessile that they could not be ligatured. Under the circumstances, and in view of the fact that removal of the appendages does not always remove the symptoms of myoma, especially pain, it was decided to extirpate both womb and ovaries. Accordingly, a Tait's wire clamp was applied around the cervix, below the ovaries, and screwed up. The tumor was then amputated, and the stump cauterized and swabbed with a solution of perchloride of iron in glycerine, and secured externally at the lower angle of the wound. The patient did well for the first two days, was then very ill for the next two days, with incessant vomiting, rapid pulse (144), moderately high temperature,—flatus, however, passing after first forty-eight hours; at the end of four days all the symptoms suddenly improved, when copious diarrhœa set in. From this time the

patient gave no further anxiety. The clamp was removed on the 13th day. Convalescence was interrupted by an attack of cellulitis, from which she recovered perfectly. The catheter was at no time necessary. The case furnishes an exemplification of the fact that when undertaking the removal of the appendages for myoma, the operator may find, when he gets into the abdominal cavity, that he cannot do this, but may have to proceed to hysterectomy. In this case the extra-peritoneal method most in favor with British operators, and so successful in the hands of Keith, was selected, although it must be admitted that the intra-peritoneal method, when perfected, is that which, in the future, will probably give the best results.

Dr. Alloway spoke of having assisted Dr. Gardner, and of the gratifying results obtained by the operation.

Alexander's Operation.—Dr. Alloway read a report of a case of extreme retroflexion, for the cure of which, after all other means had failed, he performed Alexander's operation of shortening the round ligaments.

Dr. KENNEDY remarked that the operation was still on its trial.

Dr. SMITH said that Dr. Alloway's diagrams were most instructive and accurate, and that he congratulated Dr. A. on being the first to perform this operation in Canada. It would, however, be interesting to see the effect of future pregnancies upon Dr. A.'s patient.

Dr. WM. GARDNER said he had been present both in consultation and assisting during Dr. Alloway's operation. He looked upon the case as one of the most typical he had recently met with for Alexander's operation. There was not the slightest evidence of pelvic inflammation nor ovarian disease, and still the patient was, and had been for some time, a confirmed invalid, although every other known method of treatment had been adopted for her relief. Dr. G. said, in regard to pessaries in these cases, that increased experience had led him to use them very much less often of late than he had formerly.

The PRESIDENT remarked that he had the pleasure of being present at Dr. Alloway's interesting operation, and that he fully appreciated the difficulty in performing it.

Dr. TRENHOLME also reported a case of Alexander's operation, and stated that though some time before the profession, it had not yet obtained an unquestioned place in gynæcological surgery. There is still doubt as to the particular class of cases in which it may reasonably be expected to be useful. Further study is needed as to the anatomy of the round ligament. This line of investigation could be helped forward by those who have charge of the dissecting rooms. If the ligament is frequently found to be imperfectly developed, we will then have to see in what class of cases this anomaly exists, for upon this fact will depend the selection of cases. He said it was with this end in view that he now gave the details of a case lately under his care. The history is as follows: The young lady is 26 years of age, slight build, but regularly and well developed, and from earliest appearance of menses has been a sufferer. There are severe pains preceding and following the menstrual flow. Her sufferings are so severe that she is obliged to lie in bed and take sedatives, or resort to hot water fomentations for their relief. The menstrual pains are gradually increasing in severity and duration, so that at present they last for six or seven days. During the flow, and for about a week before the premonitory symptoms of the flow, she enjoys comparative comfort. Upon examination, the uterus was found retroverted and the fundus well down into the hollow of the sacrum. The left ovary was displaced and occupied the pouch of Douglas; it was also tender and slightly enlarged, probably due to chronic inflammation. The right ovary and left Fallopian tube were normal, but there was inflammation of the right Fallopian tube. The uterus was easily replaced, but the prolapsed ovary on the left side and the diseased tube on the right rendered the retention of any form of support a difficult matter. There were no indications of thickening of the tissues from pelvic cellulitis. Under these circumstances he proposed Alexander's operation as a substitute for the more serious one of removal of the ovaries and tubes. The operation was undertaken, when he found the left round ligament so extremely attenuated that it afforded no hope of a successful result, and, consequently, the operation was abandoned. The vein accompanying the cord was very much congested, which he regarded as indicating venous congestion of the pelvic viscera. Dr. T. said that in this case he had no doubt but that the congenital defect of the round ligaments was responsible for the displacement and sufferings of his patient. He might add that withdrawing the cord to the extent of two inches gave no control of the uterus

Whether this was due to a superfluous extent of cord, or some internal adhesions, he did not know. He considered this an instructive case, and from it would gather that the cases most likely to be benefited by this operation are those of acquired dislocations in those who have ceased bearing children, and where we have reasonable ground to expect a normal development of the round ligaments. He submitted this case as a small contribution to the literature of this subject, in the hope that other observers may pursue the investigation and define, with approximate certainty, the class of cases in which it should be performed.

Dr. Alloway said that the proper selection of cases was of the utmost importance. He had pointed out in his paper that there should be no evidence of pelvic inflammation, especially parametric tenderness, nor ovarian diseases, and that the uterus should be freely moveable in all directions. Upon these grounds he would draw attention to the unfitness of Dr. Trenholme's case for Alexander's operation; and observe that the reports of such cases tend to bring discredit alike upon a probably humane procedure and upon the surgeon whose name it bears. From the fact that the uterus in Dr. Trenholme's case was easily replaced, and that traction to the extent of two inches gave no control over that organ, Dr. A. was inclined to think that Dr. Trenholme had a fasciculous of muscle-tissue in his grasp and not the round ligament, as supposed. Dr. A. stated that this is a very common error, and that it had happened to himself several times when operating on the cadaver; but from the fact that traction upon this supposed ligament does not control the uterus, if that organ be not fixed, we learn that we have not seized hold of the right structure.

Stated Meeting, April 2nd, 1886.

G. Wilkins, M.D., and Vice-President, in the Chair.

Primary Cancer of Pancreas, with secondary deposits in other organs.—Dr. Rowell exhibited the specimen, and Dr. Armstrong related the clinical history of the case:

Mrs. M., aged 80, widow, enjoyed good health until three years ago. Father and two brothers are said to have died of cancer. Admitted to Western Hospital in December, 1885, suffering from loss of appetite, pain after eating, and vomiting. On examination, a hard, round, circumscribed lump, about the size of an orange, was found occupying the epigastrium, just over the region of the pyloric end of the stomach. As little was to be gained from medical treatment, a mixture containing bismuth, hydrocyanic acid and mucilage was prescribed, and she was removed by her friends to her home. It was learned at the time of her death that since her removal from the hospital the vomiting had continued persistently, the most bland liquids, even water, being immediately regurgitated. She had also suffered much pain, for which she had taken morphia pills. Nothing passed her bowels for two weeks before death, and she became distinctly jaundiced. At the post-mortem examination, 36 hours after death, only the abdominal cavity was examined. On opening the abdomen, the omentum was found adherent to the anterior abdominal wall. Liver very much enlarged, extending down to level of umbilicus, and containing several large cancerous nobules. Gall-bladder much distended, containing eight ounces of bile and a dark-colored gallstone the size of a cherry. Upon raising the liver, the head of the pancreas was found to be occupied by a cancerous mass, and the surrounding tissues were infiltrated and adherent to it. The walls of the stomach were free from disease. Complete obstruction of the duodenum occurred four inches from the pylorus, caused by pressure of this cancerous mass, together with the adherent and infiltrated tissues about it. A number of the mesenteric glands were also involved. Intestines empty. Spleen slightly enlarged.

New Method for the Relief of Ruptured Perineum.—Dr Trenholme read a paper on this subject, exhibiting drawings of the new method, as follows:—This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts, binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever-lamented Dr. Sims introduced his silver suture. The operations of Baker & Brown and others were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city, and, I might say, of this country, endeavored to dissuade a confrere

from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patients cured. This, occurring in our good city, speaks volumes. For my own part, I think the evils resulting from severe lacerations are very great, and if anything I may say will direct more attention to the prevention of these evils I will be satisfied. I feel confident that the sum-total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and varied ligaments share in the same mischief. It is a fruitful cause of retrolaxations of the uterus and prolapsus of bladder. Of all the marital misery and personal distress I need say nothing; these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well-known preparation of the patient required, especially in extensive lacerations; you all know as to this and the after-treatment also. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable, and the restoration of this body is *the one* object of perineorraphy. An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained—without it the natural support of the pelvic viscera is impossible. Not only is there apt to be hernia of the anterior rectal wall, but prolapsus of both bladder and uterus—and this in the order I have given them. The best success heretofore has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together are based upon a right conception of the anatomy of the parts. The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil, each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place, the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded—*i.e.*, the cicatricial surface in *one* piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface—(the dotted line in sketch No. 1 shows this); the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap; this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the shield-sutures (and here I would say a word in favor of the catgut suture which I adopt). It is by far the best, as it gives the greatest possible extent of surface to surface—much greater than can be secured by the interrupted or any other suture. Two deep sutures usually suffice, and these—whether silver, silk, or catgut—are passed in and secured by clamp shot upon an ivory shield. The first suture should be inserted low down, and about three-quarters of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear, and brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up. The last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, and the upper part of the flap and around on the right and left side are secured by catgut sutures; this leaves the united surfaces in the shape of the letter T. The vaginal surface is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by first intention. There is very little pain, inasmuch as the deep shield-sutures allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum, the flaps are carefully brought together by a running catgut suture, and the operation completed as in this case. The objection to all other

operations was that it left the vaginal incision open, which sometimes, therefore, interfered with union by first intention. By my method this is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained: Perfect union, perfect restoration of the perineum, no loss of substance, and no after-fever worthy of the name. Sketch 3 shows the condition of the parts at the completion of the operation.

Dr. WM. GARDNER said that, as a rule, extensive lacerations of the perineum were mischievous, and produced symptoms, yet he had seen many exceptions to this. In numbers of cases, even where some fibres of the rectum have been torn, no inconvenience followed, due, no doubt, to the integrity of the vaginal walls and to individual peculiarity. He had also seen procedentia uteri in virgins and in multiparous women, where there was no rupture at all. The principle of the method advocated by Dr. Trenholme was not new. Hart and Barber had described a similar operation, but denuding in two segments; and Tait, five or six years ago, proposed an operation similar to Dr. T.'s, with the exception of introducing the sutures somewhat different. Dr. Gardner had performed this (Tait's) operation twice, but was not favorably impressed with it. Convalescence was not so satisfactory as when he had performed Emmet's operation.

Dr. ARMSTRONG thought that the different degrees of injury resulting from laceration of the perineum in different cases depended upon the character and extent of the tear. He doubted whether a simple tear of the so-called perineal body, which consisted principally of cellular tissue and skin, was followed by much harm. There was good evidence to the contrary. The evil results charged to laceration of the perineum only obtained when either the pelvic fascia was torn or when the muscular floor of the pelvis was injured, either by a separation of the levator ani muscles in the middle line, or when one or both of these muscles were torn away from their orifice from the rami of the pubes or from the ischial spine. This fact is pretty clearly established by Emmet, by Dr. Schatz of Rostock, and by Dr. B. E. Hadia of San Antonio, Texas. The best operation is that which the most perfectly restores the parts to the condition in which they were before the injury was sustained. Emmet's new operation has yielded good results in the Western Hospital. He was not aware that, so far, any attempt had been made to unite the divided muscles in the median line or to the pelvic fascia.

Lanolin.—Dr. REID makes a few remarks on this drug, a new basis for ointments, introduced by O. Liebreich, obtained from the fat of the keratin tissues, and principally from wool. The very strong recommendations of this cholesterine fat in the articles in the *British Medical Journal* for February would cause it to be extensively tried by the profession. The advantages of rapid absorption and ready miscibility with aqueous mixtures were in a measure confirmed. Manufacturers were preparing for a great demand, and an abundant supply at a moderate price would soon be on the market. A specimen was passed around.

Operation for Intra-uterine Fibroid—Accidental Inversion of the Uterus and Rupture of the Perineum.—Dr. GARDNER reported the case as follows: Mrs. ——, childless, was sent to him from Ontario. She had had severe hemorrages for the past five years; of late they had been very excessive, and produced great blanching. On examination, a tumor was found about the size of a child's head, and completely filling the vagina and uterus. *Operation*—The tumor was fixed by an assistant and removed piece by piece by means of scissors, fingers and serregated scoop. Towards the end of the operation, whilst dragging strongly on the remaining portion of the tumor, it suddenly gave way, tearing the perineum and inverting the uterus. The uterus was easily replaced, but sutures were not applied to perinenm in order to facilitate irrigation and drainage of the uterus. For this purpose Dr. Gardner always employs the double tubes fixed to the cervix. Convalescence proceeded very satisfactorily for five days, when the temperature rose and diarrhœa set in. This condition persists in spite of treatment. It is feared she has amyloid disease of the liver and other organs, the liver being now enlarged and smooth. She is also passing large quantities of urine containing albumen.*

Progress of Science.

THE TREATMENT OF ACUTE INFANTILE BRONCHITIS.

At a recent meeting of the New York Academy of Medicine Dr. J. Lewis Smith read a paper with

* She died a week later from pleuro-pneumonia.

the above title (*Medical Record*, March 6, 1886.) The subject was considered under two heads: (1) mild, and (2) severe bronchitis. He believes that simple bronchitis could be aborted, or rendered milder, by an emetic employed when the first symptoms appeared. For this purpose ipecac was probably the best. Measures designed to abort the disease, however, were not usually indicated when the patients were first seen; to be employed with success they must be adopted very early.

The treatment for mild, uncomplicated, primary bronchitis was very simple. A favorite mixture of the late Dr. Jackson, of Boston, consisted of equal parts of almond oil, syrup of squills, simple syrup, and mucilage of gum arabic. Of the mixtures in the Dispensatory the mistura glycyrrhizæ composita was the best. The compound syrup of ipecac of the French Pharmacopœia was a most elegant mixture.

When the temperature was 102° F., and above and the respiration correspondingly accelerated, he had been accustomed to use a mixture consisting of sweet spirits of nitre, syrup of ipecac, and syrup of balsam of tolu.

Severe Bronchitis.—When the inflammation involved the smaller bronchial tubes localized atelectasis was liable to occur, and also catarrhal pneumonia, which was one of the most dangerous diseases of infancy.

The indications for treatment in a severe case of bronchitis were to promote expectoration, to diminish inflammation, to strenghten the action of the heart, and prevent exhaustation.

In reference to cough there was safety in it, and he seldom added opium to any of his prescriptions which were designed to relieve cough. Although children did not expectorate, the bronchial tubes were as effectually emptied when the sputum was swallowed. To facilitate expectoration two remedies had been used largely, namely, carbonate and muriate of ammonia; the latter was preferred in most cases, except in the advanced stages, when the former might be advantageous as a stimulant.

A favorite formula for the use of muriate of ammonia with him had been muriate of ammonia, one drachm; balsam of tolu, two ounces. When there was great dyspnœa and indications for clearing the bronchial tubes of mucus, this remedy should be administered every half-hour. Dr. Smith had not witnessed any marked benefit from the use of senega or squill. To get rid of large quantities of mucus an emetic was sometimes proper.

To sustain the Patient and reduce the Fever.—He had not noticed any marked reduction of the temperature by the use of quinine, but it seemed to him that it had been useful as a heart-tonic administered in small doses. For a child one year of age, half a grain to one grain. Antipyrine might be of service, but care should be exercised in its use. In a vigorous infant, suffering from bronchitis without or with only a very slight amount of pneumonia, it might be used. Digitalis as a heart-tonic was one of the best which could be employed. Alcoholic stimulation was necessary in severe cases; two or three drops of whiskey in water, for each year of age after three months, given hourly or every second hour.

External Treatment.—Leeching and vesication have been abandoned. Slight irritation of the surface affords relief, and for this purpose he had been accustomed to use a flax-seed poultice, first rubbing the chest with camphorated oil in young children, and using a mixture of mustard and flax-seed, one to sixteen, in older children, enveloping the chest with the poultice and covering it with oil-silk. In those cases in which there was hurried respiration, accompanied by continued moaning, to cover the chest posteriorly and anteriorly with a poultice, and over the whole place an oil-skin jacket would afford marked relief.

In robust children the application of cold to the chest during the acute stage, as recommended by Henoch, of Berlin, might be of more service than poultices. For all infants under six months of age, however, poultices were preferable.

Change in position of the child he regarded as a most important element in the treatment, laying the child first upon one side and then upon the other, and upon the back.

The chairman invited Dr. A. Jacobi to open the discussion, who said that whenever Dr. Smith read a paper very little, if any thing, remained to be said. There were some points which he would like to impress upon those present, and who would doubtless see more of these cases hereafter. One of the principal points to which allusion had been made, and of which he wished to speak, was the use of *opium* in these cases. We could not do well without opium in many of them, because there was so much irritation; but he would emphasize the necessity of giving as little as possible. If it was to be given at all, give a good-sized dose at night, for the purpose of securing a number of hours of sleep. He would express his conviction that in no small number of cases of capillary bronchitis and acute pneumonia in adults the patients died in part of their disease, in part of the influence of opium. Certainly opium would suppress expectoration, and without expectoration bronchitis and pneumonia were almost invariably fatal.

There was one great expectorant which Dr. Smith had not mentioned, and that was *water*. Where was the expectoration to come from unless there was fluid in the body? It was all well enough to give muriate of ammonia and expect it to liquefy the expectoration; but the liquefaction could not take place without plenty of water, and the chief danger was that water was not supplied in sufficient quantities to young infants, older children being able to ask for it.

Another important point was the regulation of the temperature and moisture of the atmosphere

in the room; this is especially important in all cases of so-called dry bronchitis.

With reference to the use of *digitalis*, he believed that two or three large doses in twenty-four hours were preferable to small doses frequently repeated. A child one year of age would take one grain of digitalis three times a day, for as many days as would be required, and the effect would be much better than if the remedy was usually employed.

Another exceedingly valuable expectorant was *camphor*, the effect of which was permanent, and it was more easily taken than carbonate of ammonia. A child one year of age might take one-quarter, one-half, or even one grain of camphor, rubbed up with glycerin as often as every hour or every two hours, and in bad cases of bronchitis or pneumonia, where expectoration was wanted, he had not seen any expectorant which had served him a better purpose.

Turpentine also, by inhalation, was an excellent expectorant. Put a tablespoonful or two tablespoonfuls of spirits of turpentine into the kettle of water which is kept in the room to moisten the atmosphere, and the air will be impregnated with the vapor of turpentine, which will greatly benefit the patient.

Dr. John C. Peters was asked to continue the discussion, and said that one remedy, which was the best of all expectorants, and which allayed the cough, had not been mentioned, and that was potassium. The form in which he usually prescribed it was the liquor potassæ, one drachm to four ounces of water, which of itself was somewhat soothing. All of the alkalies, but more particularly potash, increased the ciliary movement of the bronchial epithelia, the only way in which expectoration was brought forward where it could be reached by cough. Besides, a solution of potassium would dissolve mucin, while simple water would not. He had almost abandoned the use of ipecac, except, perhaps, in small tonic doses. When there was great congestion and dyspnœa the administration of small doses of calomel, sufficiently large, however, to move the bowels, would relieve the heart and lungs, and render *digitalis* more active than it otherwise would be.

With reference to external treatment, he had used flannel chiefly, perhaps covering the chest with cotton. He thought that the frequent changing of poultices exposed the infant too much.

With reference to change of position, he had been in the habit of placing the child on the face, and had found it very beneficial.

He never used quinine as an antipyretic, but thought it beneficial in preventing the migration of leucocytes.

Dr. Joseph E. Winters said that while, perhaps, acute bronchitis could not be aborted, the inflammation certainly could be minimized. During the time when the congestion was limited to the bronchial artery, remedies which would reduce the force and frequency of the heart's action would reduce the inflammation, and for this purpose he employed veratrum viride, already mentioned by Dr. Ripley, or aconite; as a reliable article of veratrum viride was somewhat difficult to obtain, he frequently used the latter agent. This expectation, however, was realized only in cases of acute primary bronchitis.

After this his method of treatment was to use derivatives, and then mild cathartics consisting chiefly of alkaline mixtures.

The second indication was to prevent accumulation of catarrhal secretion, as here occurred all the deaths. For the prevention of the accumulation of this secretion he used stimulating expectorants, and they varied according as to whether the expectoration was thin or viscid. In this condition cough also become remedial. During the catarrhal stage he combined camphor with other agents in a sufficiently concentrated form to excite a cough, which would, in part, be voluntary. Besides, he applied stimulating liniments to the surface of the chest, which would provoke deep inspiration. For this reason he thought that large poultices were dangerous, and that putting a pound of flax-seed, mixed with water, upon the chest of a child one year of age, would materially interfere with respiration. He preferred the oil-silk jacket, or, perhaps, spongiopylin, with cotton batting and oil-silk. The oil-silk was generally sufficient, with the use of a stimulating liniment, applied by putting the hand under the jacket, without exposing the chest of the child at all. He always insisted upon the following order in most of these cases: First, make the external application, then administer the expectorant, which would excite a cough, and then administer an emetic, and do all this at bedtime.

Opium became a dangerous remedy in young children, and he thought chloral did equally as well. When the secretion was watery and excessive, camphorated tincture of opium might diminish cough and secure rest, but it was not often indicated.

As to whether capillary bronchitis existed independently of broncho-pneumonia, he had his doubts because when capillary bronchitis was found at autopsy it was associated with more or less of broncho-pneumonia.

Dr. H. D. Chapin made special reference to the use of bromide of sodium, which he had used with good results. The use of opium had been pretty well condemned by the speakers by whom he had been preceded; and even in the doses recommended he had seen, it seemed to him, unfortunate results due to its use. In rachitic children he had noticed a more rapid and a more marked narcotic action produced by opium than in otherwise healthy children. In one case he felt quite certain that the brown mixture, regarded as perfectly safe in ordinary cases, nearly caused the death of his patient. For some time, therefore, he had used the bromide of sodium, and, although it did not act rapidly, yet by giving it continuously

it produced a sedative effect, which had seemed to him to be safe and beneficial. He would be more afraid to use chloral than opium.

With reference to cases of mild bronchitis he thought one of the best remedies was to put the child to bed at the outset, and when this was done the large majority of children would get well without special treatment.

Dr. J. H. Fruitnight spoke of the use of iodide of potassium in the second stage of the disease, especially when the secretion was viscid, administered in doses of one-fourth to two grains, according to the age of the child. He favored the use of oil of turpentine combined with balsam of fir. —*Therapeutic Gazette.*

IRRIGATION IN BOWEL DISEASES IN CHILDREN.

An eminently practical article on the therapeutic value of irrigation in treating diseases of the bowels in children is contained in the *Archiv fuer Kinderheilkunde*, written by Monti, the well-known Vienna clinician and specialist in children's diseases. The article is contained in the *Manchester Medical Chronicle* for April and deserves special reference at this season, when we are on the threshold of all the anxieties and perplexities incident to summer diarrhœas and enteric difficulties.

As regards the method of executing the operation nothing special is said. An ordinary fountain syringe, holding from two to four pints, with a soft tube one or two yards long, and a hard rubber nozzle and a stop-cock is used. Soft tubes or gum-elastic catheters can be fitted on. If the fluid is to be retained an obturator is added, consisting of a truncated cone or soft gutta-percha, which is perforated in its long axis in order to let pass the catheter. This cone is oiled and passed into the rectum, where by its expansion it occludes the passage. A low pressure is advised, and suspension if straining is apparent. About 2–2½ inches of soft catheter may be pushed into the rectum in the new-born. Experiment justifies us in saying that practically the whole of the large intestine can be irrigated. The ileo-colic valve may be passed, but only in such cases where abdominal pressure and peristalsis are inoperative.

In speaking of the application of the measure in the special diseases, Monti says, that in dyspepsia the irrigation at once removes tympanites and undigested caseine, half decomposed masses of fat or amylacea in acid fermentation. Colicky pains that prevent sleep and cause convulsions are at once stopped. Simple enemata never accomplish the desired result. The author rejects as useless the much-lauded aromatics, such as camomile, anise-seed and fennel water, that only increase acid fermentations. The quantities of water used should be adequate to fill the whole bowel up to the ileo-cecal valve, and vary with the age and weight of the child. In the new-born, weighing under 6½ pounds, seven to ten ounces are enough; in heavier children, ten to fifteen ounces; in sucklings in the first four months, seventeen to twenty ounces, and so on up to forty ounces. Percussion of the colon tells us when the bowel is filled. If colic comes on, allow the fluid with the gas and solid ingesta to escape; then resume and finish the operation. In chronic dyspepsia the proceeding may be practised twice daily for some time.

In coprostasis the accumulations come away by irrigation, properly done. Some laxative may be injected with the water.

In habitual constipation, not alone accumulated fæces are removed, but also the inertia of the bowel is overcome. The irrigation should be made at a fixed hour and a large quantity of water used. And the temperature of the water becomes an important factor. In the beginning of this methodical treatment the water should be about 86° F., and gradually a temperature as low as 55° F. is to be reached.

The value of the practice in enteritis follicular is denied by Henoch, but Monti is emphatic in favorable recommendation. He says: "Thorough irrigations of the large intestine are indicated in all cases of enteritis without exception, mild or severe, acute or chronic. The regulation of the diet on definite principles, and the irrigation of the bowel, either with water or medicated fluid, chosen according to the indications present, are the only rational measures that can be taken in all cases of enteritis. I treat all my cases of enteritis with nothing but suitable diet, and locally with carefully managed irrigations of the intestine, and only in exceptional cases do I ever give internal medicine. The irrigations must be commenced at once, whether the symptoms are local or general; waiting till the case is more serious is only depriving ourselves of a valuable mode of treatment. There are really no difficulties in the way of any one carrying out this treatment. Large quantities of fluid must be injected. Mere clysters are useless. I begin the treatment of acute enteritis with an irrigation of water. The temperature of the water should vary with the severity of the disease. In slight cases, where the stools are just slimy where the tenesmus is moderate and there is no fever I use water at 72° F., in severe cases I take fresh water from the tap. The first washing out, if properly done, is generally followed by good results; straining ceases, and there is no motion for several hours. As soon as the straining and characteristic dejections disappear an astringent irrigation should be given. One or two per cent solutions of tannin or alum may be used, or a half per cent. solution of acetate of lead. Disinfecting solutions, carbolic, salicylic, or resorcin, do not do good in acute cases. These injections should be given twice a day until the pathognomonic stools disappear. In all cases of chronic enteritis, with putrid dejections, disinfecting solutions of benzoate of soda, boracic acid, resorcin or salicylate of soda should be used, and after the dejections have

ceased to be putrid, astringent or simple irrigations should be employed."

In catarrh of the small intestines, Monti considers the irrigation of the large intestine as only an aid to internal and dietetic treatment.

Also in infantile cholera he believes the irrigations indicated only at the beginning of the attack and before collapse is manifest. In collapse they should be discontinued. Three irrigations at the commencement of the cold stage, either of one per cent. of common salt, or two per cent of tannic acid, and in severe cases a solution of benzoate of soda, 500-100 in 1000 parts, or six drops of creasote in 1000 parts are useful.

Irrigations are indicated in all cases of dysentery and of conspicuous service. Water is first used to wash out the bowel, and cold compresses to the abdomen are made. Iced milk and tea with lemon and rum are given. The next irrigations should be astringent as described for follicular enteritis, two or three a day being administered.

Monti has also employed weak solutions of common salt (a drachm to thirty-five ounces) to remove tympanites in abdominal typhoid fever; the temperature should be about 66° F., large quantities being necessary to secure good effects. Astringent solutions of a mild character benefit profuse diarrhea. No extended trial of the method has been had in this ailment.

Caution is necessary in cases of typhitis or perityphitis; much harm can come from irrigation during the periods of active mischief, when the temperature is much elevated. Also in invagination of the bowels. Unless the seat of it is in the colon, especially the descending colon, and the intussusception is recent and not too extensive, no good can be expected from irrigation. In ileum or ileo-cecal invaginations success is rare. The author advises a warm bath for a half hour of 95° F., previous to the injection, the patient in addition being chloroformed to relax all muscular effort. The pelvis, too, should be raised very high. And to this end we believe that the posture proposed by Cari Nicolaus, the knee-shoulder posture, as described in the *Review*, March 13, 1886, would be a highly proper and useful one. A soft catheter or tube should be introduced as far as possible into the bowel, and the water introduced at a low pressure first. On regurgitation stop the procedure, and then cautiously begin again, increasing the pressure. Use external manipulation at the same time. If water fails to reduce the obstruction, air may be insufflated or carbonic acid water. Luke-warm water should first be used to relax the bowel and enable the introduction of a large quantity of water. The finish may be with ice-cold water to excite peristalsis.

Helminthiasis, also, especially cases of oxyuris vermicularis, pin worms, were successfully treated by the complete irrigations repeated a half dozen times or more on successive days. To clear the small intestine, a purgative should first be given. Medicinal soap, 1-5 parts to 1000 parts of water, is the best irrigation in such cases.

Taenia were also treated by the combined method of washing out the bowel in the morning with 2–4 pints of luke-warm water; the same is done in the evening with the addition of a purgative. Next morning pomegranate is given by the mouth, and, after the first evacuation, a solution containing pomegranate is thrown up into the lower bowel.

The article, all in all, contains many practical points based upon rational thought and actual experience.

THE DIETARY IN INDIGESTION.

By J. Milner Fothergill, M.D. Edin.

When I hear medical men denouncing a regulated dietary in indigestion, my surprise is excited. Is it a malady to be combatted by drugs only? I do not think anyone will support that proposition. Medicinal agents are not without their value; but the medicinal treatment of indigestion is surely but auxillary to the dietetic management. That a regulated dietary is too often a restricted dietary—so restricted indeed that the patient is practically half-starved—may be admitted. But need a regulated dietary necessarily be a very restricted one? I opine not; if the matter of the dietary of the dyspeptic be given a little more attention.

And for this it is well to keep the physiology of indigestion in mind. Digestion is solution by hydration so that the carbo-hydrates and albuminoids may pass through the wall of the alimentary canal; after which they are de-hydrated—else they would pass out by the kidney, giving glycosuria and peptonaria, and leaving the body unfed. But a preliminary to solution is disintegration. If mastication be not properly performed the "lumps" of food find their way into the stomach and offend it.

Pastry, pieces of hard potato, cheese, are notorious offenders. The solvent action of the gastric juice can exercise no disintegrating effect upon the substances, while they act as irritants and set up pain. A piece of meat comparatively unchewed is less objectionable, because the gastric juice acting upon the connective tissue allows the muscular fibrillæ to fall asunder. But even with muscular fibre there is a wide difference. Pork and veal are hard meats, and, not readily falling to pieces in the stomach under the action of the gastric juice are held, and rightly too, to be indigestible. On the other hand, a thin slice of well-boiled ham, cut across the fibre is very digestible. So is the loose fibre of a sheep's head. This is the mechanical aspect of the digestibility of food. Hard stringy meat is very indigestible. So are ill-cooked vegetables, and especially the cruciferæ, so are hard-boiled eggs.

Fish, and especially white fish, whose fibres very readily fall to pieces, are in repute with dyspeptics for obvious reasons. Fish which are fatty, are indigestible (because the fat resists the

action of the gastric juice) as the flesh of the salmon, the mackerel and the herring. The short fibre of the whiting, "the chicken of the sea," makes this fish especially digestible. Then come the flat-fishes, the haddock and the cod. They all are best boiled, for, if fried, care is requisite that the flesh be not soaked in fat—when it is highly indigestible. There are few more indigestible matters than a fried sole which has not been skillfully cooked. And the same holds good of birds. Chicken and game are digestible, while the duck and goose, greasy-fibred meats, are as certainly indigestible.

Potatoes have an evil reputation, but that again is largely a matter of cooking. A potato which is imperfectly cooked has a hard centre. A "stone" an Irishman calls it—and if palpable pieces of such hard indigestible matter be swallowed gastric distress is the intelligible result. But if the potato be well cooked and put through a sieve it ceases to be indigestible from "the mechanical point of view." It is the question of disintegration which militates against vegetables, and cooked fruit. Pieces of hard apple will sit lightly on the most irritable stomach. The flesh of the grape is in great repute in all conditions of gastric irritability and debility, whether primary or secondary, to some general sickness.

Fat is an offence to a susceptible stomach, even as liquid fat floating about in it; but still more as lumps of fat upon which the stomach can exercise no solvent influence. Hence many persons, children and adults, reject sweet pieces of fat, and (after the meal) take some fishy oil. As the digestion of fat does not commence till the food has left the stomach, it is not well to give fat till its "time draws nigh." Thin stale bread with butter rubbed well in and doubled is much more digestible than the same bread cut thick with a stout layer of butter plastered over it.

Pastry, when fat and flour are well rubbed together, form a most indigestible compound, resisting all disintegration except mastication. Suet puddings also are indigestible.

On the other hand, milk puddings, especially of made without an egg, are in repute, and not without reason, for dyspeptics. They are light and sit easily on the stomach, the farinaceous matter being readily disintegrated, and what escapes disintegration is soft and does not give offence to the stomach.

There is another matter not of accult but of microscopic disintegration, or actual solution which has yet to be discussed—a matter of vital importance. As savage man sat grinding the cereals which form so large a factor in human food, the action of the jaws produced a free flow of saliva, and as fast as the finer particles were broken off the seed, by the crunching of the teeth, diastase of the saliva converted the insoluble starch into the soluble dextrine and grape-sugar. The toil of the miller produces disintegration and relieves the jaws of much of the labor. But disintegration is only the precursor of solution. The starch granule remains. By heat the cook cracks the starch granule so that the solvent diastase can readily act upon it. So far, so good; but heat does something more. It has an actual solvent action, and heat will, if sufficient, cause conversion of starch into dextrine. A thoroughly well baked flour if subjected to the iodine test under a microscope will readily show this.

When a large quantity of raw unconverted starch enters the stomach it is a burthen to that viscus. The gastric juice has no effect upon starch, and the starch granules merely embarrass, the action of the stomach until they find their way out of it by the pyloric ring—and sometimes by the way they entered, viz., the gullet. Undigested starch hampers the stomach and makes the labor of that viscus a painful toil to it. New bread is a gross mechanical irritant, resisting disintegration. The impediment caused by isolated but numerous starch-granules is another matter. Biscuits and crackers, if insufficiently masticated, cause indigestion. So do cakes which have not long been exposed to heat. The cakes which are held in such favor by the breakfast table in American households have been regarded as indigestible, and a glance at an American cooking book explains why. These cakes are exposed to heat for from thirty to forty minutes only. [The language of England sometimes requires translation. For cakes read rolls, and for biscuit read cracker. —Ed.] A good biscuit or loaf is much longer in the oven. Potatoes are indigestible as ordinarily eaten, because they are not long exposed to heat. But if well mashed potatoes be put into the oven to brown, or be placed before the fire for that purpose, the longer exposure to heat tells upon the starch-conversion.

Hominy that is well-boiled or subjected to the final heating process of cooking is decidedly digestible. Cereals that have been steam-cooked are in repute with dyspeptics either for adding to meat teas, or for preparing milk-puddings. Some cooks who have to cater for dyspeptics boil all their rice, sago, and tapioca thoroughly before making these up with milk for a milk-pudding. In Germany pearl-barley thoroughly well boiled and passed through a sieve is in request as an addition to meat teas for invalids. The porridge of Scotland, being made with coarse oatmeal, is boiled a long time, while in England a short boil is enough with the fine ground oatmeal in vogue there.

The advantage of the numerous prepared foods —whether babies' food or invalids' foods—which are all more or less compounds of starch which has been to a certain extent predigested either by baking or the malting process, lies in their ready digestibility. A touch of saliva is enough to complete the conversion of such carbo-hydrates, and the soluble matters pass out of the alimentary canal, and the stomach is not burdened with a weight of undigested starch impeding its work.

Gross and fine disintegration of food are cardinal matters in the dietary of dyspeptics.

Mastication must be perfect, else gross particles embarrass the stomach. Starch granules which have escaped the saliva interfere with the solvent action of the gastric juice on albuminoids. The dietary of dyspeptics must be conducted on the above lines; and if the dyspeptic were properly informed he could find a sufficient variety of food; but if he be told to diet himself upon a numbea of articles of food he soon begins to loathe them and often goes without food sooner than partake of them.

Of course there are dyspeptics and dyspeptics! Some only require to give a sufficiency of time to the process of mastication to be free from suffering. Others must eschew pastry, veal and pork. Others again have to abandon solid meat and vegetable and adhere to meat broths, with cooked starch, malt-extracts, malted preparations, milk puddings and fish. When the stomach has been outraged or offended care is requisite for its restoration. When there is present a condition of general exhaüstion food will disagree which ordinarily can be taken with impunity. When a condition of acute indigestion is set up a very careful dietary for a few days is directly curative.

Ready disintegration and solubility of food constitute the base line of the dietetic treatment of indigestion.—*Journal of the Reconstructives.*

FOOD IN THE TREATMENT OF NEURASTHENIA.

By J. A. Gunning, M.D., New York.

Neurasthenia is a peculiar condition brought about in two ways: First, by the hurry and bustle and severe mental strain of this age. Second, through the ignorance of the majority of human beings as to the physiological action of foods.

At the time we are consulted as to treatment, we find that the symptoms presented are dependent upon an extremely low condition of vitality throughout the entire chain of systems, more particularly that of the digestive and circulatory. Upon inspection of these patients we find a lack of vitality, tone, elasticity, color of skin, and a loss of flesh, or that peculiar enlarged under-nourished tissue, having the appearance of flesh, but really indicating a condition worse than loss, and one notes also a peculiar condition of the brain, vacillating between an unnaturally active and excitable condition, to one of quiet, melancholic depression and moroseness. The organ that is the greatest sufferer, and one upon which all others depend to a very great extent, the stomach, the first great reservoir or receptacle of tissue supply, is in a correspondingly low type of inactivity and uselessness from loss of vital force, consequently, its action is impaired, its products are of inferior quality, its solvent powers are impeded, either from a defective supply or a deficit in quality. Hence, all the tissues fail to receive their proper amount of nutrition, and the supplying corpuscles, in consequence of this loss, lose their ability, and, necessarily, their power to work, and begin to deteriorate; white ones take the place of red, causing two very trying things to contend with, the already enfeebled corpuscle being unable to transport a supply of building material to the tissues, is also incapacitated to bring on its return, the worn out, disintegrated material that ought to be eliminated, instead of which, it is absorbed, or, by some caltalytic action, exercises its poisonous influence upon the nerve centres, thereby still further interfering with, and cutting off their stimulation, and hurrying on the condition of starvation, and placing the economy in this extremely trying position. No material for rebuilding, and no means of supplying it, even if it had it under he circumstances mentioned. How can a wagon without bottom or sides carry a load? First thing to do is to mend the wagon. How is it to be done? Put life into the corpuscle by carefully selected materials. This cannot be done by bromide, belladonna, strychnine, etc., for reasons already given, but by life-giving properties.

When examining patients for a cause among his histories recorded, I find that it extends back into the past and that the principal cause was the penalty of transgressing the natural law governing the supply of proper renewing material through the digestive system. By way of illustration, I beg to present an ordinary history of these cases about as follows: The patient will say: "Years ago when I became very much interested in my business, circumstances were such that I had to devote a great deal of time and individual attention to it, and so wholly absorbed would I become that meal times were entirely forgotten, and I would go an entire day without eating, and even should I take the meals I felt my time was so precious that it was only wasted, and as a consequence I ate as hurriedly as possible, only partially masticating my food, and at night, between indigestion and the pressure of business, I slept but little; still I thought it was not injuring me, and kept on in the same careless way. Now I have succeeded in accomplishing what I was striving for, but am in no condition to enjoy it. What shall I do?"

Believing, as I do, that in most cases of Neurasthenia the condition is one of actual starvation, I will now consider the remedy. This consists in proper feeding. The remedy is not a new one, but how much time do we give to the thought of nourishing our patients, or bother our heads, especially about the tissue or tissues involved, and the physiological needs of the system. As a rule when beef tea, mutton broth, milk and eggs have been suggested, we leave it entirely to the patient to make the choice, and they select the most palatable, and so leave them. Food is as much a therapeutic agent as any of the materials called medicine, and if we were to devote one-fifteenth of the time to therapeutical research that we do for pathological we should soon have less pathology to investigate.

Very little reasoning is required to show that there ought to be a close chemical relationship be-

tween the food eaten and the tissues which it is designed to build up and the ever impressive fact that the tissues are constantly undergoing change and being thrown off through the lungs, kidneys and other excreting organs show that unless this supply of renewing material is of the proper kind, quality and quantity, we have a wasting that will be more rapid than repair. In this enfeebled condition what food is demanded and how administered? We find that of all the materials furnished for a complete nourishment of tissue, milk is the best, because it contains material for every kind of tissue, hair, skin, bone, muscle, nerve, and it is the first form received into the body. Any other food then would only act as a foreign agent producing death. When we have a condition of worn-out, partially operating tissue that cannot use general food, milk should be substituted and used, and, in the use of it, it is quite as necessary to watch its effects as upon the infant. When not received or becoming burdensome, dilute with water or add antacids or digestive ferments until it begins to be acceptable to the stomach and not causing distress, and by carefully watching you can judge how much and how frequently to order it. Patients vary from one teacupful to two teacupfuls every hour and a half to three hours. The next article is chopped beef in connection with milk because it furnishes the important part of a more concentrated albuminous food, and, lastly, taking advantage of the researches of chemistry, the beef peptonoids carefully given in small quantities often repeated, are a great saving of wear, as they contain the materials for renewing and are more easily assimilated.

The application of these foods I divide into three classes or divisions that I make in this disease. In that class that complain of weariness, easily fatigued, no appetite, fair form or weight, rather disposed to restlessness, I employ milk used as a drink during the meal in lieu of tea or coffee, and insist upon the time of thirty minutes being devoted to each meal. Exercise or short walks and light gymnastics may be commenced in a mild way and gradually increasing them until a certain gentle stimulation is felt, with a little recognized line of medicine such as phosphorus, maltine and strychnia. The second class of patients, that are pale, feeble and thin with a general wasting away of tissue (not only by absorption, but by actual breaking down) I add to the milk chopped or ground meat. I use chopped or ground meat because if the patient is careless, and swallows his food without chewing, the stomach can manage it better than in lumps. One of the most trying habits to overcome and requiring close watching is this of hurriedly putting the food into the stomach without being thoroughly masticated, and I always require them to rest after each supply of food an hour to an hour and a half. The next, or third class, is more complex and the most trying. In this we have the blending or grafting on of an hysterical condition upon the already low condition of neurasthenia presenting symptoms of both, and requiring a treatment for both. It is needless to say that it is not an easy thing to carry out this treatment. First, they require to be very closely examined to see that they are free from what is generally called organic disease (a difficult matter in some cases, to tell where the functional ends and the organic begins), and we should be very careful in selecting the cases on this point. I think the great error is carelessness in this matter, and consequently the reason we have so much fault found with the plan of treatment. An important and necessary condition to further the effect and to apply the treatment properly is absolute isolation, with complete and continued rest in some regularly appointed or arranged place. Dr. Mitchell, who first suggested the combined plan, says: "It is rare to find any of this class of patients described so free from the influence of these habitual surroundings as to make it easy to treat them in their own homes.

"It is needful to disentangle them from the meshes of old habits, and to remove them from the contact with those who have been willing slaves of their caprices. I have often made the effort to treat them in their own homes and to isolate them there, but I have rarely done so without promising myself that I would not again complicate my treatment by any such embarrassment. Once separate the patient from the moral and physical surroundings which have become a part of the sickness, and you will have made a change which will be in itself beneficial and aid in the treatment, using all the forms of food mentioned, milk, ground beef, peptonoids with a general line of mixed diet. The mechanical means in inducing the assimilation of food from the very commencement, is massage; properly applied in a cautious way until it is applied over the entire body, carefully and thoroughly.

Never use massage unless you can secure rest for your patient, varying from a period of not less than one hour thereafter, and this rule will apply to all cases where massage is used. In the first class I mention, it is only necessary to apply it to the upper extremities, because the lower have all the exercise necessary if the walking is kept up.

The second need it for a longer period and more generally, while the third class, need it twice daily, morning and night, or when the food seems burdensome, for a period varying from forty-five minutes to an hour at each time, with complete rest in bed.

The following will illustrate the mode in which I treat an ordinary case of neurasthenia, belonging to the second class in which I feed and give a limited amount of massage.

Foods used at the beginning of treatment:

1. *Milk*, diluted or pure.
2. *Chopped or ground meat*, (principally *beef*) made into cakes and broiled to a slight brown tint.
3. *Beef Peptonoids.*
4. *Bread* with plenty of *butter.*
5. *Thin Soups*, made from *Beef Peptonoids*, or to which the *Peptonoids* are added.
6. *Eggs*, small amount.

Diet for a Day Third Class:

At the beginning I order half to one goblet of milk every two or three hours, alternating with beef peptonoids in soup form. These peptonoids I generally give stirred into soup or broth, or even in the milk, sometimes a little pepsin or lactopeptine is given. I do not find that peptonised milk is agreeable to patients.

Later, after digestion is better established, I put patients on a diet somewhat as follows:

7 a.m.—One cup of strong coffee with sugar, but no milk.

8 a.m.—Chopped meat, steak or chops, one glass of milk, bread and butter, thoroughly baked potatoes, vegetables in season.

10 a.m.—One goblet of milk.

11 a.m.—Massage.

1 p.m.—Dinner of meat, potatoes, vegetables, light farinaceous pudding.

5 p.m.—Goblet of milk.

7 p.m. Light supper, with stewed fruit, not very sweet, bread and butter.

9 p.m.—Goblet of milk, sometimes a small steak.

If this treatment is carefully and thoroughly carried out one will be greatly pleased and surprised to see these listless, feeble, thin, pale creatures gradually transferred into rosy, well-formed, cheerful, renovated and able beings, ready again to combat the vicissitudes of life and care, with an elastic skin, bright eyes, rosy hue, digestion good, blood red and increased in quality and quantity, minds clear, buoyant, cheerful and happy.—*Journal of Reconstructives.*

A FEW PRACTICAL OBSERVATIONS ON VACCINATION, THE PRESERVATION OF LYMPH, AND OTHER POINTS.*

By Enoch Snell, F.R.C.S.E.

District Medical Officer and Public Vaccinator for Nottingham.

Mr. President and Gentlemen,—I propose in this paper to consider not only the manner which experience has shown me is the most appropriate method in which vaccination should be performed but to treat of the preservation of lymph, some of the objections that may be urged against vaccination, and, lastly, to refer to the question of vaccinosyphilis.

In the first place, let us consider the operation of vaccination and the preservation of lymph which my own experience as a public vaccinator has taught me to be of practical importance.

Use a plain bleeding lancet for vaccinating, it being the most readily cleaned. A sewing needle is a convenient substitute, it is always at command, is found in every house, and, being only used once, cleanliness is insured.

Make the punctures or scratches on the child's arm as far apart as possible, having regard to the appearance of the arm from the position of the cicatrices in after life; by attention to this the vesicles are less likely to coalesce. Without adopting this precaution much trouble may follow, especially in scrofulous children.

In summer the formation of the vesicle is more rapid than in winter.

Three months is stated to be the best age for performing the operation, but I decidedly think above this age to be preferable, between the fourth and fifth month.

The risks of vaccination are undoubtedly increased by opening the vesicles, and unless lymph be required, such a proceeding is most unjustifiable. Never under any circumstances postpone a vaccination without certifying such postponement, as, if the child be taken to another for the performance of the operation, and information withheld, the vaccinator will obviously be placed at a disadvantage. Be very careful not to take too much lymph from a single vesicle, as by so doing irritation is produced and erysipelas and other complications may follow; and never under any circumstances countenance the use of vaccination shields.

I will read an extract from a letter which appeared from me in the *British Medical Journal* last year which expresses my views in respect to these potent agents in the spread of erysipelas, &c.

"As regards vaccine shields, I look upon them as a source of harm, and sometimes of actual danger to the children upon whose arms they are used, and, personally speaking, I do not know a single good point in their favor. The shield, to hold it in its position, has to be tightly tied round the arm, which obstructs the circulation and produces more or less congestion in the immediate neighborhood of the vesicles, and this, I need hardly say, it is most necessary to avoid. On the other hand, if the shield be not tightly fixed, it moves about on the arm, and its hard and dirty edges coming in contact with the vesicles, rub them into open sores, and probably inoculate them with impure discharge from another child's arm, as, *and I make a strong point of this*, in poor localities the mothers are in the habit of lending them to one another."

I was called to see, not long since, a child I had vaccinated in this town, and was let in for a fair share of wrathful indignation. It was suffering from erysipelas, which soon assumed a serious character. I was at a loss to account for this disorder, knowing the origin of the lymph, and having used it also for three other children, all of whom had done well. I discovered one of these objectionable shields in the room, which I found on inquiry had been sent in to the mother by her next-door neighbor, with full instructions as to its use and with an earnest entreaty that she would use it for her child, as she had done for hers a few weeks before.

Just a word in respect to the treatment of vaccine vesicles.

I always urge upon the mothers who bring their

*Read before Nottingham Medical Society.

children to my station, on no account to use any moist application, but, on the contrary, to let the vesicles dry and form a scab; and, if there be a tendency in the vesicles to "run," then to dust them well with powder of oxide of zinc. In cases of tardy recovery, especially those associated with an eczematous condition, I find an invaluable remedy in this ointment :—

Unguentum hydrargyri ammon. ʒ j. to
Unguentum plumbi carbonatis ʒ j.

Of this prescription I cannot speak too highly, for it rapidly promotes a healthy appearance in the vesicles.

Dr. Sinclair (I think of Edinburgh) has lately suggested the use of white blotting paper, when the vesicles remain moist for a considerable time. But I have no experience in its use.

The Preservation of Lymph.

Much has been written in respect to the preservation of lymph, both animal and humanized.

Humanized lymph preserved in tubes soon becomes inert, and after being stored for a few weeks, *always* fails to produce when used, *typical vesicles*. This is a startling opinion to express, and I am conscious that I make it before those who are accustomed to use lymph after being preserved in this way for months. But my opinion is based on a long experience; and I never obtain with lymph stored beyond a few days such typical vesicles as those produced by it in its fresh state.

Lymph in tubes may be preserved for a far longer period, if the precaution of keeping them in a cool place be adopted. But even then the results are not satisfactory.

Warlomont says :—"Vaccine may be preserved in tubes for ten, twelve, or fifteen months, but to say of a thing, that it may be, is not to say that a always or often happens." And he mentions it test case between two vaccinators. He says : "We vaccinated together, and for purposes of comparison, an equal number of children, some from arm to arm, others with vaccine preserved in tubes. The difference in the two modes was apparent in the result. The second produced about half as many vesicles as the first, although the vaccine in tubes had not been taken a month."

How then can lymph be best preserved to suit our requirements? For we must have it ready at hand.

On July 21st last I took some vaccine in tubes from a carefully selected vesicle, and sealed them. I also took some of the *same* lymph in my watch glass, mixing it with about 25 per cent. of glycerine, covering it over with another glass, and placed them in a pill box in a cool cellar.

On October 16th I vaccinated from both sources obtaining, as I expected, my accustomed ill-success from the tubes; but after thoroughly stirring up the lymph preserved in glycerine with a lancet, I obtained from it as good results as if my vaccination had been performed with fresh lymph.

The result of this experiment may perhaps induce some of you to try the same method of preservation, and your results will, I have no doubt, be equally gratifying.

At what period in the development of the vesicle is it best to take lymph for preservation?

For all practical purposes the eighth day does very well, but in hot weather a little earlier is preferable, as lymph taken from vesicles too fully matured is liable to fail.

THE PROPHYLAXIS OF ASTHMA.*

By David W. Yandell, M.D.

Many years ago, when Trousseau was urging the value of belladonna in the treatment of spasmodic asthma, I began its use in certain cases where the disease affected children. Occasionally I got good results—occasionally failure. Subsequently, when the bromides were brought prominently forward as antispasmodics, and, combined with belladonna, were so much used in the management of whooping-cough, I begun, as some one had suggested, the administration of the bromide of potash and atropia as a prophylactic in asthma. The results have been so satisfactory that I wish to ask attention to the treatment.

What I am about to say applies exclusively to children, for, as seen in adults, asthma has usually existed so long that it has wrought changes in the pulmonary apparatus quite beyond the control of the remedies under consideration; and, even in children, the full good of the drugs is only obtained when these are given with the utmost regularity during long periods of time, and in doses sufficient to produce their distinctive physiological effects. Under these conditions, conjoined to certain hygienic measures which I will mention further on, I am persuaded I have prevented asthma from fixing itself on many subjects who, otherwise, would have become permanent sufferers from this dismal affection.

Perhaps, by describing the management of a case, I shall be able to put what I wish to communicate in the fewest words :

One night in July, 1865, I saw a well-developed girl, six years old, in a sharp asthmatic seizure, which was soon relieved by a few doses of tincture of lobelia. I found that for two years before she had been subject to such attacks whenever she caught cold, and that the paroxysms had gradually grown more frequent, less and less "cold" being required to excite them. She was usually much worsted by a seizure, two or three days elapsing before she felt fully well again.

At my next visit I directed ten grains of bromide potash to be given in a glass of seltzer water every morning on rising and at bed-time. To the latter dose was added the one hundred and twenty-fifth

*The notes of which this paper is an abstract were made in the main while the writer occupied the chair of the Theory and Practice of Medicine in the University of Louisville.

of a grain of sulphate of atropia. The mother was instructed as to the pathogenic effects of the medicines. Two days after it was found necessary to increase the bromide by five grains at a dose, which soon produced anesthesia of the fauces, when the quantity was reduced to twelve grains, an amount which was not exceeded. Dryness of the throat and slight dilatation of the pupils followed after four days' use of the atropia. This medication was continued steadily for three months. Throughout the greater part of this time, the patient had iron and strychnia after food, the was required to live in the open air and take a cold sponge-bath daily. She was provided with a cough mixture containing a considerable quantity of opium, and her mother directed to use it on the appearance of the first symptoms of a cold. She had, in the period named, but two attacks of asthma, both slight. In the ninety days preceding the treatment, she had five attacks. The treatment was now suspended for a fortnight, when, the weather growing cold—this was in November—it was resumed and continued for the succeeding four months. In that time she caught several slight colds, but had no asthma until in March, when, after a wetting in a sleet, she had a mild seizure that yielded to five grains of Dover's powder. This was her last attack. For the next four months the medicines were given fifteen days in each month, and then omitted until the following December, when they were given uninterruptedly for sixty days. Ten months having passed without a seizure, notwithstanding the patient had suffered several sharp catarrhal attacks in the time, further treatment was deemed unnecessary. It is proper to add that the patient made no change of house, and had practically the same surroundings during the entire time. She remains free from asthma to this day.

Since this case I have treated, by the same method, eight other cases of asthma in persons aged respectively three, ten years; two, eleven; one, twelve; one, thirteen, and one fourteen years old. All recovered but two, and in neither of these was the treatment fairly carried out by the parents. None were dismissed under fifteen months, while two were under treatment for two years.

In five of the nine cases, the disease was hereditary. Eight of the nine were unmistakably neurotic. Perhaps this fact may serve as an explanation of the success of the treatment.—*American Practitioner.*

THERAPEUTIC.

Copis tecta, a plant native of China, has been found to slow the pulsations of the heart similarly to digitalis, so that we have another addition to our cardiac sedatives.

Capparis Corriacea, a native of Peru, in the shape of an infusion, three drams of the powdered fruit infused in red wine being the dose, has been found useful in epileptic, hysterical and other similar disorders.

Salix nigra in fluid extracts is much lauded as a sexual sedative, being used in ovarian irritation and in some cases of dysmenorrhœa where there is a sexual excitement.

Urtica urens, a decoction made from the common stinging nettle, is strongly recommended by Rothe as a local hæmostatic.

Parthenine, from the Cuban plant known as parthenium-hysterophorus, comes forward as a new anti periodic. It appears to have great power to reduce temperature in fever, in the maximum dose of thirty grains.

Peroxide of hydrogen is reported to have produced excellent results in the treatment of diphtheria. It may be administered with glycerine.

Capsicum annum will be found of great service in alcoholismus, where there is a great restlessness, burning in the stomach, and coldness between the shoulders.

Phormium tenax, a botanical product of New Zealand, bids fair to prove a valuable auxiliary to the surgeon, in producing healthy granulations in wounds.

Chronic acid, ʒ i to aqua ʒ i applied locally at intervals of a week, is said to be an excellent remedy in endocervicitis.

Myrtle, an ounce of the leaves of the common variety, boiled in a litre of water, is said to be an excellent injection in the treatment of leucorrhœal discharges.

Antipyrine still holds its place as an antipyretic, and it has been successfully used in scarlatina, in five grain doses every hour, in children. Good results are said to follow its alternation with digitalis. Sweet spirits of nitre is incompatible to antipyrine, the combination forming a blue aniline.

Adonis vernalis is claimed to be superior to digitalis and to convallaria, in many cases of cardiac disease. It is said to be powerfully diuretic, and not cumulative in its action. It is used largely in chronic heart diseases.

Electricity is said to be a most reliable agent in increasing the secretion of milk. Both currents are allowed to pass through the breasts for fifteen minutes twice a day.

Kali chloricum is recommended by Dr. Richard Hughs in simple stomatitis.

Stigmata maidis is extolled by Dr. Burt in angina pectoris, when the pain is increased by ascending steps.

Iodol is highly spoken of in syphilitic and other ulcerations, where there is no gangrenous tendency. Buboes are injected with a solution of one part iodol to sixteen of alcohol and thirty-four of glycerine.

Aluminium acetico-tartaricum is claimed as a new specific in ozcena. The dose is one teaspoonful of a fifty per cent. solution in one-half to a pint of water, we presume applied locally.

Pichi (fabiana imbricata), native of Chili, is said to have a wonderful effect upon the formation

and discharge of renal and vesical calculi. The profession will be glad to add to their armamenarium in this tedious affection.

Ichthyol, in thirty per cent. solution, is said to relieve the severe itching of senile prurigo, and a ten per cent. solution relieves pruritus. Four tablespoonfuls a day, of a one per cent. solution internally, has relieved the worst cases of gastritis.

Trypsin (Fairchild's) is now offered as a solvent for diphtheritic membrane. The well-known properties of the pancreatic juice give the strongest grounds for anticipating success in its application for this important purpose. Trypsin acts quickly and powerfully upon fibrin and fibrinous membranes. It is not dependent upon the interaction of acid, as is the case with pepsin. It is most active in a slightly alkaline media. It may be applied by spray or brush. In practical use the results have been very encouraging. It may be obtained of the principal drug houses in this country, and is dispensed in ½, ¼, and 1 oz. bottles, with full directions.

*** Demange says (*L'Union Medicale*) that diabetes insipidus is best treated by valerian, in doses of two to four drachms of the powder per diem. —*Technics.*

MANAGEMENT OF BREECH PRESENTATIONS.

At a recent meeting of the New York Academy of Medicine Dr. Robert A. Murray read a paper with the above title (*N. Y. Med. Jour.*, March 13, 1886), which dealt principally with the measures necessary to be taken to deliver in breech cases and to diminish the percentage of mortality. The importance of an effort in this direction was apparent from the fact that the statistics quoted from authorities gave a mortality in breech presentations of about one in eight and a half cases. Among the causes of this class of presentations were a contracted pelvis, an excessive amount of liquor amnii, violent movements, and a peculiar formation of the lower segment of the uterus. It was also remarkable what a large proportion of the cases occurred in premature labor and multiple pregnancy. The statistics of Simpson went to show how frequently, the child being dead, the loss of tonicity of the spine and the presence of flaccidity in the tissues caused malpresentations. Those tables demonstrated that there was a constant tendency after the sixth month of pregnancy for the head to present.

In a case of breech presentation in which the mother's pelvis was of full size and regular form, and the child of moderate proportions, labor would probably be accomplished without particular difficulty, and the obstetrician had only to wait. If, however, the indications were that the labor would be difficult, if the pelvic cavity was not roomy, or the child of large proportions, version, if it was to be performed, should be done early, before the rupture of the bag of waters. If the case was allowed to progress, no obstruction being met with, the critical moment for the child would be just after the birth of the trunk and lower extremities, for now the cord was in danger of becoming compressed between the unyielding head and the pelvic wall. The cord should be pulled down and placed next the sacro iliac synchondrosis by the side of the child's head, where it would be least likely to become compressed. The contractions of the uterus might be followed up by the hand, and flexionof the head might be aided by rising the trunk of the child. But in cases in which the limbs were extended upward over the front of the child, so that the toes were near the face, the breech was not nearly so large as the child's head, and, being readily moulded, entered the pelvic cavity; the entire fœtus then presented, as Barnes had well described, the form of a wedge with the base upwards. Now, if traction was made by means of hooks, fillet, or forceps, and unsuccessfully, as it was likely to be, the apex would be dragged into the pelvis, and, the cavity becoming more tightly filled, compression of the cord would be increased and the uterus rendered more irritable, and here the-only measure for the safety of the mother and child was to bring down a foot. The use of the blunt hook to do this was difficult, as it was apt to slip and injure the soft parts or cause fracture of the thigh; consequently, if the child was living, it should not be resorted to. The fillet, if it could be guided over the limb, might cut the tissues or prove too weak to overcome the difficulty. The obstetric forceps had been recommended in these cases, but it was condemned by most authorities. It was only adapted for use on the head. The performance of cephalic version, recommended by Spiegelberg, would be possible only before rupture of the bag of waters and before the breech became wedged.

The clear indication in such a case was to break up or decompose the obstructing wedge, which was to be done by bringing down one foot. The position of the breech in relation to the pelvis having been determined by ordinary diagnostic points, the hand was to be passed in front of the breech where the foot lay, and one foot seized by the instep and brought down; then the breech would probably soon descend. The cord would be better protected than if both feet were brought down. The foot nearest the pubes was most easily drawn down. If the case was not otherwise complicated, the labor would now go on naturally. If the breech filled the brim, or was forced into the pelvic cavity, little space would be left for the operator's hand, and under these circumstances the hand would would have to be passed up to the fundus uteri in order to grasp the foot. That hand should be introduced whose palm would touch the abdomen of the child when introduced. When the foot was reached, preferable the anterior one, it was seized by the instep and drawn down out of the vulva. It was essen-

tial to get hold of the foot; taking hold of the knee or hooking the thigh in the groin, would be of no use. During the operation the uterus should be supported by the other hand or by an assistant. If inertia uteri should now exist, we should still have attained, by our hold on the foot, security for further progress of the case.

The operation of extraction by the breech might be divided into: 1. Drawing the trunk through the pelvis. 2. Liberation of the arms. 3. Extraction of the head. Traction on the leg should be carefully made, in drawing the trunk down, coincidently with the pains. The trunk should be drawn downward and backward in the axis of the brim, external pressure being made by an assistant, the traction being kept up until the breech was fairly in the pelvic cavity. After the extraction of the breech, the chord should be carefully looked after. Liberation of the arms might become necessary if the pelvis was at all contracted, or if traction upon the trunk had been too rapid or had not been accompanied by external pressure on the uterus.

The head being at the brim, Smellie's method might be employed in the manner recommended by Schroder, or the method of Scanzoni. In all cases of breech presentation the forceps should be at hand ready for application to the head if it should be necessary. Particular care should be taken during its introduction not to lacerate the cervix. Passing a catheter up into the mouth of the child at this stage would frequently save life.

The subject of the management of breech presentations had been brought to the author's mind forcibl during the past year from the number of cases which he had seen in consultation, in nearly all of which he had found difficulty arising from flexion of the legs on the abdomen, diminishing the size of the breech to a certain extent, and at the same time forming a wedge that became more tightly impacted as the child descended. In all of these cases unsuccessful efforts had been made to extract before he was called, and he was impressed with the advantage of introducing the hand and bringing down the foot over other methods, such as the use of the forceps, the blunt hook, the fillet, etc.—*Theraputic Gazette.*

INHALATIONS IN PHTHISIS.

I have employed, at different times, a large number of inhaling fluids and many different combinations. The fluid and combination to which I now give the preference is creasote and alcohol, equal parts, to which I also frequently add a like proportion of spirits of chloroform. This combination is certainly very useful in allaying cough and modifying the quantity and quality of the sputa in pulmonary phthisis. I therefore recommend it very warmly. The alcohol if added to the creasote for the double purpose of diluting it and making it more volatile; the spirits of chloroform are added, in view of the experience of Dr. Cohen, of Philadelphia, to diminish local irritation and excessive cough. The inhaler must not be worn too long at first, nor should too much fluid be poured on the sponge at any single time. In either event, instead of giving relief, disturbance is caused; the throat is rendered more irritable, and the patient complains of increased soreness and tightness in the chest. Properly and judiciously employed, the creasote inhalent relieves symptoms notably, and in the beginning, at least, of pulmonary phthisis, is, I believe, a means of decided utility so far as the possible arrest of the disease is concerned. It is important that beechwood creasote be used. At first the inhaler should be worn ten to fifteen minutes every two or three hours; afterward, it may be worn half an hour or an hour at a time, or even longer. When the length of time is gradually increased, only positive benefit will result. From ten to twenty drops of fluid should be added to the sponge at any one time. If more is added, it will cause undue irritation. The fluid should not be poured on the sponge more than two or three times in twenty-four hours. Precisely the way in which creasote is most useful is, perhaps, difficult to state. By its antiseptic action it is possibly destructive of bacilli; by its local action and general effect it is certainly of value in combating catarrhal conditions. Where purulent cavities exist it tends to destroy or neutralize putridity. These are certainly sufficient good reasons for its use without pursuing the inquiry further. At all events these inhalations do good. The physician notices it and the patient affirms it. In many instances they allay cough better than any cough-mixture, and they are certainly free from the great objection of destroying appetite, as opium and morphine so frequently do.—*Dr. Beverly Robinson in N. Y. Medical Journal.*

OBSTETRIC.

Cold Water in Labor.—(*Med. and Surg. Rep.*) The only reliable oxytocic that I have found in my obstetrical practice is cold water. Its efficacy in exciting contraction of the uterus in post-partum hemorrhage is well established; and its superiority over other agents in hastening labor with less danger is shown in the cases reported by Dr. H. Garvin (who was the first to call attention to its efficacy in this direction), and also in several which have occurred in my own practice. I think if this method was more frequently employed we would have less rupture of the os uteri or perinæum, and less post-partum hemorrhage. I cannot better explain the action of cold water to the uterus than in the language of Dr. Garvin: Cold when brought in contact with the surface, though locally depressing, through its communication with the nervous centres, acts as a stimulant affecting the whole system or only certain organs, according as it is generally or locally applied. All are familiar with the effect of cold water sprinkled upon the face in attacks of syncope, also

its more powerful stimulant influence upon the brain in narcotic poisoning. It does not act as ergot, producing by its toxical influence on the nervous system an abnormal and dangerous stimulation of the parts which are affected by it, but the reverse; the dormant or flagging powers are, as it were, awakened to renewed action, a normal state of affairs is re-established, and the functions are carried on as they were previous to their failure. The following mode of using this remedy is recommended: The water should be cold; it is not necessary always to have ice-water, as Dr. Garvin suggests; but, if convenient, it is preferable. A towel should be dipped in it, and wrung until only sufficient water remains to wet the parts to which it is applied; this should be quickly placed upon the abdomen, so that as much of the cold will remain as possible; the cloth should be changed every five or ten minutes, or as soon as it becomes warm.—*Technics.*

THE MANAGEMENT OF PLACENTA PRÆVIA.

Dr. Malcolm MacLane offers the following rules as those which should best govern the treatment of placenta prævia (*Amer. Journ. Obstetrics*, March 1886):

First.—In any case avoid the application of all chemical styptics, which only clog the vagina with inert coagula, and do not prevent hemorrhage. At the very first, the patient should be put in a state of absolute rest,—body and mind,—and a mild opiate is often desirable at this stage to quiet irritation.

Second.—Inasmuch as the dangers from hemorrhage are greater than all else to both mother and child, at the earliest moment preparations should be made to induce premature labor; and labor being once started, the case should be closely watched to its termination by the accoucheur.

Third.—In primiparæ, and mothers with rigid tissues, the vagina should be well distended, by either the colpeurynter or tampon, as an adjuvant to the cervical dilatation.

Fourth.—In the majority of cases generally, and in all cases especially where there is reason to believe that rapid delivery may be required, it is more safe to rely upon the thorough continuous hydrostatic pressure of a Barnee's dilator than on pressure by the fœtal parts.

Fifth.—Where the implantation is only lateral or partial, and where there is no object in hurrying the labor, bipolar version, drawing down a foot, and leaving one thigh to occlude and dilate, the os may be practised according to the method of Braxton Hicks, except in cases where the head presents well at the os, when,

Sixth.—The membranes should be ruptured, the waters evacuated, and the head encouraged to engage in the cervico-vaginal canal.

Seventh.—In the majority of cases, podalic version is to be preferred to application of the forceps within the os.

Eighth.—In some cases, in the absence of sufficient assistance or the necessary instruments, the complete vaginal tampon, in part or wholly of cotton, may be applied and left *in situ* until (within a reasonable time) it is dislodged by uterine contractions and the voluntary efforts of the mother. In cases of favorable presentation,—occiput or breech,—the tampon will not materially obstruct the descent of the child, and in some cases the tampon, placenta, and the child will be expelled rapidly and safely without artificial assistance.

Ninth.—The dangers of septic infection by means of the tampon or india-rubber dilators are so slight, if properly used, as not to be considered as seriously impairing their great value.

Tenth.—Whenever it is possible, dilutation and delivery ought to be deliberately accomplished, in order to avoid maternal lacerations.

Finally.—As cases of placenta prævia offer special dangers faom post-partum hemorrhages, septicæmia, etc., the greatest care must be exercised in every detail of operation and nursing, to avoid conveying septic material to the system of the mother.

Absolute cleanliness, rather than chemical substitutes for that virtue, should be our constant companion in the practice of the obstetric art.

TREATMENT OF PAINFUL FISSURE OF THE ANUS WITHOUT OPERATION.

Mr. C. G. Wheelhouse employs the operation of "stretching" the sphincter ani is advocated, in preference to "cutting" the muscle. This treatment Mr. Wheelhouse recommends in fissure of the anus, because "we can attain our end without causing an external wound, and thereby rendering our patient liable to septic poisoning." I have hitherto treated these fissures without any operative interference at all, and with such success as to warrant a continuance of the method. The following case will illustrate it:

J. T., a coachman, aged fifty-six, had for eighteen months suffered such agonizing pain during defecation that an enforced habit of constipation was established. From time to time he relieved his bowels by enemata, first taking a large dose of laudanum to alleviate his sufferings. On examination with a speculum, I found a fissure, nearly an inch in length, with irregular edges and an indurated base. The sphincter was much hypertrophied, and contracted powerfully and spasmodically during the examination.

I ordered a full dose of castor oil, with some rhubarb for its secondary astringent action, forbidding the customary laudanum. When this had operated I had the bowels well washed out with an enema containing Condy's fluid. This done, I passed the speculum and painted the fissure with a solution of chloride of zinc (twenty grains to one

ounce); then introduced a piece of lint, smeared with boric ointment, the contraction of the sphincter keeping it in contact with the sore. The bowels were kept in check by pilula plumbi et opii. Liquid food only was allowed.

The subsequent treatment consisted in the use of a powder (powdered boric acid, half a dram; violet powder, one ounce), which was sprinkled freely on lint, and introduced into the anus to dry up any discharge, and the continued use of the boric ointment.

By these means the fissure was entirely healed in six days, and there has been no return of the symptoms.

I have always found one application of chloride of zinc enough; it usually causes some smarting and uneasiness, but nothing more effectively purifies the ulcer or stimulates the reparative process. The introduction of cocaine robs the operative procedure of one drawback, the necessity of taking an anesthetic; yet I may recommend a trial of this treatment, at least in the case of those who have an innate horror of any thing approaching "cutting"—*A. D. Macgregor, M.B., British Med. Journal.*

THE TREATMENT OF EPILEPSY WITH BORAX.

In the *Boston Medical and Surgical Journal*, February 10, 1886, Dr. Charles F. Folsom calls attention to the use of borax, and reports cases in which the use of borax, commencing with ten grains three times a day, and then increasing up to fifteen grains, finally to twenty grains three times a day, served to greatly reduce the number of convulsions, even although nearly all the other methods of treatment had proved unavailing. In other ways the improvement was also great; the attacks of *petit mal*, which formerly were almost incessant, occurring sometimes twenty in a single hour, are now very seldom the source of annoyance, while the general health is almost perfect. The only annoyance noticed was a dry scaly eruption, giving rise to a good deal of itching, but which disappeared after several weeks' use of arsenic internally, and oxide of zinc ointment with vaseline given externally. Aromatic tinctures given with the borax prevented the nausea which immediately followed its use when mixed with water alone. Borax cannot be claimed ever to cure absolutely cases of epilepsy in which the bromides have failed, but it nearly always will produce improvement in the general health, and will lessen the severity and frequency of the convulsions. Dr. Folsom especially recommends the alternate use of borax and bromides, particularly in cases which have been for a long time under the influence of bromides, and which are therefore in the wretched condition nearly always caused by prolonged use of these drugs. The first few doses of borax often produce diarrhea, which soon ceases. Eruption on the skin is readily controlled, and the tendency to nausea, flatulency, and indigestion is easily met by chloroform, tincture of cardamom, compound spirits of lavender, etc., given with the borax.

THE CURE OF ASTHMA.

In a recent communication to the *Medical Record*, Dr. Richard B. Faulkner, says: "I understand by the term asthma, the condition of spasm of the bronchial tubes of both lungs, with hyperæmia approaching or amounting to inflammation, accompanied by rales upon both inspiration and expiration, with great difficulty of breathing, and the term is applied to the paroxysm alone, which returns at regular or irregular periods. Disturbance of function or disease of structure of the pneumogastric nerve is always present.

To cure paroxysms, I originated a method of treatment nearly five years ago; and repeated observation has confirmed its great utility. When called to a case of asthma, with a camel's hair brush, I made a streak of Churchill's iodine over each pneumogastric nerve in its course in the neck, from the upper part of the thyroid cartilage to the upper borders of the clavicles. By counter-irritation thus applied, the capricious and abnormal exercise of nerve-force by the pulmonary filaments is controlled, and bronchial spasm promptly relinquished. Such is my original method—simple, certain, quick. Churchill's tincture is the best counter-irritant, because, first, it is convenient; second, its action is easily controlled; third, it does the work. To permanently cure the paroxysms, it is usually necessary to remove the underlying morbid condition upon which they depend or are associated.

DIARRHŒA AND FEEDING BOTTLES.

"Baby has the diarrhœa, doctor." "Do you nurse him?" "No, doctor, he takes the bottle." How frequently has this conversation taken place between doctor and mother.

One of the commonest causes of diarrhœa, nasty, persistent diarrhœa, that resists treatment, is the use of the bottle. Yet it should not be so; it is not a necessary accompaniment of the bottle.

But the majority of mothers are careless about keeping the bottle clean. Two bottles should be always in use. When one is emptied, it should be well washed in hot water, thoroughly rinsed, and allowed to stand full of warm water, into which a small piece of washing soda has been introduced, until required for use, when it should be again well rinsed.

Long nursing tubes are abominations, and form ready nests for the propagation of disease germs. We should employ the ordinary rubber nipple, without any tube, and, having several on hand, those not in actual use should be kept soaking in water and soda. If we have good milk, that has

not soured, and if we observe these simple precautions we will soon cure these obstinate diarrhœas without drugs.—*Medical and Surgical Reporter.*

INDUCTION OF PREMATURE LABOR.

Dr. T. Gaillard Thomas says: The method of inducing premature labor which I now invariably adopt is a very simple, and is at the same time a perfectly efficient, one. The patient is placed across the bed, with the buttocks resting near the edge, and under is arranged a large piece of rubber or oil-cloth in such a way as to drain into a tub on the floor. In this tub we put one or two gallons of water at a temperature of ninety-eight degrees Fahrenheit. The operator stands between the thighs of the patient, whose knees should be properly supported, and employing a syringe with a long nozzle, which is carried up as far into the cervical canal as it will go, he keeps a steady stream directly against the membranes. In the course of ten minutes the os will be the size of a silver half dollar, and when dilation to this extent has been accomplished, he is to insert a gum catheter between the membranes and the uterine walls. The patient is then put to bed, rhythmical uterine contractions soon follow, and the labor is completed in a few hours.

THE TREATMENT OF EPILEPSY.

M. Ball, professor at Clinic St. Anne, gives preference to the bromides of sodium and ammonium in the treatment of epilepsy in solution, and belladonna with oxide of zinc in pills. The mixture he employs is the following: Bromide of sodium and bromide of ammonium, ʒ iss; water, ʒ x. Four tablespoonfuls a day in an infusion of valerian, and a pill night and morning, composed of ext. of belladonna and oxide of zinc, 15 grains, divided into 40 pills. He considers the bromide of potassium inferior to the other bromides, which are much more easily supported, and do not produce the loss of memory and weakness of the intellect attributed to a continued use of the potassium. However, in the cases of phthisical patients the bromides of sodium and ammonium are not well borne.—*Medical Press.*

NUX VOMICA IN PROLAPSUS ANI.

M. Schwartz has employed, during the last ten years, with good result, extract of nux vomica to combat procedentia of the rectum, not only in children, but also in adults, and even in those cases in which, from neglect and want of care, the case has become chronic. He dissolves one or two grains in a glass of distilled water, and gives seven to ten drops every four hours, and he asserts that the prolapse disappears in twenty-four hours. For children, as a rule, the dose is five drops, and for children one or two years of age, only two or three drops. To prevent relapse the nux vomica should be given for eight days after the cure, two doses being administered daily. If the prolapse be of long standing and do not at first yield to the nux vomica, one drachm of extract of krameria should be added. The nux vomica overcomes the paralysis of the intestine, and the astringent krameria controls the diarrhœa which the relaxation of the intestine provokes.—*El Dictamen.*

A LINIMENT FOR EARACHE.

Pavesi recommends a liniment composed of camphorated chloral 2½ parts, pure glycerine 16-½ parts, and oil of sweet almonds 10 parts. This is to be well mixed and preserved in a hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

A PAINLESS METHOD OF INTRODUCING THE CATHETER.

The plan suggested by Dr. J. H. Berst, in the *Therapeutic Gazette* is the spurting of a few drops of a four per cent. solution of cocaine mur. into the mouth of the urethra, and allowing it to seek the deeper parts of the canal by gravitation. This can be accomplished with an ordinary medicine dropper, the point of which has previously been glazed by holding in the flame of a spirit lamp.

By this simple method of producing local anæsthesia the writer has been enabled not only to painlessly cauterize his patients, but in four cases perform internal urethrotory, and carry out the after treatment, viz., the daily introduction of a full size sound, without causing any pain whatever.

TREATMENT OF SCABIES.

Dr. Comessati says (*Pharm. Zeitung*) that the following is an easy, effective method of treating the disease: In a liter of water 200 grams of hyposulphite of sodium are dissolved. The entire body is thoroughly washed in this lotion, at bedtime. The next morning the body is washed in a solution of 50 grams of muriatic acid to the liter of water. By this means sulphur in a very finely divided state is deposited in the pores of the skin; sulphurous acid and chloride of sodium are also formed. These products are destructive to the parasite. The great advantage that the author has found in the use of this treatment is that it need not be repeated.

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MONTREAL JUNE, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

We hope to see a large attendance at the Tri-Annual Meeting of the College in Montreal on the 14th July. Perhaps it will be the most important session which the College has had for many years, as the question of a Central Examining Board, and an alteration in the method of electing the Governors comes up for discussion and decision.

In our last issue we intimated that we were in favor of both these changes being made. Indeed a new departure is necessary in electing Governors, or the College will never obtain the support of the mass of the profession, who now give it little or no sympathy and grudgingly pay their annual assessment of two dollars. Our article on this subject in the May number of the *Record* has called forth several letters from subscribers, the most important of which comes from a well-known and distinguished physician in the Eastern Townships, He says:

"I have just been reading your editorial in the May No. of your Journal anent the changes contemplated by the College of P. and S., Quebec. Do not for one moment fancy I have any ambition to gratify in the matter. I have none whatever. But I have had thirty long years of experience in affairs appertaining to our profession, and should know something whereof I speak. You state that the Profession as a whole in this Province take but little interest in the transactions of the College. Do you wish me to suggest a very simple remedy? Bring the constituencies in the first place into more satisfactorily-defined limits, ignore entirely the old and antiquated divisions in use, and take the modern ones, *i. e.*, those adopted at the time of the passing what was called the Judicial Dicentralization Act. This every one of ordinary intelligence understands. Although originally intended for judicial purposes, it was later made the basis of representation in the Senate at Ottawa and also in the Legislative Council of this Province. I might go still further, but it is not necessary—you see, we know each other fairly well, either personally or by reputation—in each of these divisions, and it brings home to every one of us a personal interest in the election, and without which things will go on in the future as they have in the past. Now this point I perceive you mention in your editorial, but you do not seem to think it of the importance that I do.—Fancy any *other* election to take place on any other than the well-defined basis at present in use, and you will soon see much of the interest and zeal in that cause disappear. There will be healthy rivalries and local pride excited, that will never, in my humble opinion, be created if you persist in the present unnatural divisions; dues will be more promptly paid (in order perhaps to secure a vote), and local feeling and interest aroused which cannot but result in the general good of the profession. This of course must exclude the possibility of electing or nominating any candidate not actually a resident of the District at the time of the election.—I do not know the number of Governors now allowed by the Act, but I believe there are *nineteen* judicial districts in this Province. If I am correct, surely that number would not be too great, even with the augmentation you refer to from the Colleges."

"Let me just say, in conclusion, that I think there are very few people living about here, whether medical men or not, who know the limits or extent of our own district. That I *do not* is most certainly true. I am a native of this place, and expected to vote intelligently for the district in which I have always lived, and yet cannot tell you whether or not the man I might favor lives within this jurisdiction. But I *do* know the borders or boundaries of this district. I am led to make these remarks because I notice there is a clause in the proposed changes which bears upon the point. Unless things are better defined in these respects, you will readily see no general professional interest in college matters can be awakened. And I quite agree with you that it is high time that the entire membership should feel that individual concern in the College which its importance deserves."

"Do not misunderstand me—what I feel of *vital* importance is to so change the rules as to admit of *one* Governor being elected from each judicial district in the Province, whether rural or city, and

that the candidate (or candidates) for such district shall be a "bona fide" resident of the district he aspires to represent—without this it will be only representation in name."

One point in the report of the Committee which we fear will give rise to an acrimonious discussion is that which incidentally refers to the advisability of giving the College a permanent resting-place, thus causing it to cease its annual visitations to the good city of Quebec, for if such a decision be come to, Montreal must of course be its location. In the interest of the College it is best that it should have a local habitation, and that locality which furnishes the majority of its business should be the place of its abode. Montreal gives to the College of Physicians and Surgeons over eighty per cent. of its business. This is a fact to which we direct particular attention. We are satisfied that if sectional feeling be put aside, and the question judged upon its merits, no difficulty will be found in endorsing the recommendation of the Committee. We trust this will be done; if it is even those in middle life may look forward with a fair degree of probability to seeing the College housed in a building of its own, and a Library founded which in time will be a boon to the profession of the Province.

TORONTO MEDICAL SOCIETY—The following have been elected officers of the Toronto Medical Society for the ensuing year: President, Dr. McPhedran; 1st and 2nd Vice-Presidents, Drs. Nevitt and Machell; Recording Secretary, Dr. Peters; Corresponding Secretary, Dr. Cochrane; Treasurer, Dr. Spencer; Council, Drs. Atherton, Graham, and Reeve.

CANADIAN MEDICAL ASSOCIATION.

The Nineteenth Annual Meeting of the Canada Medical Association will be held in Quebec on the 18th and 19th of August next. Arrangements have been made with the Railroad and Steamboat Companies, whereby each Member or Delegate may secure return tickets for himself and wife and a patient, at the rate of a fare and a third each. The necessary certificates entitling Members to this reduced rate will be issued by the Secretary on application. Intending readers of Papers are requested to notify the Secretary of the fact, giving the title of the Paper to be read, at their earliest convenience, in order to facilitate the arranging of the Programme of the Meeting.

THE ONTARIO MEDICAL ASSOCIATION.

The *Canada Lancet* says:

The last meeting of this Association, held in Toronto, June 2nd and 3rd, was in every respect a success. The number of well-known gentlemen taking part in it; the character of the papers and discussions, and the friendly spirit evinced by all, will make it remembered as a time of profit and pleasure to all who were present. Not the least pleasant feature was the presence of some American medical brethren. We are sure they were heartily welcomed, and it is to be hoped that that spirit of mutual acknowledgment of merit between members of the profession of the two countries may continue, and lead to more frequent interchange of thought at our meetings. Especially refreshing and encouraging was the presence of the veteran President of the New York State Medical Society, Dr. Moore, of Rochester. All who listened to the clear, incisive sentences, delivered with the force of full conviction of the truth of what he uttered, must have felt that they were in the presence of a mind matured by years of study and close observation. The address of the President was a valuable one, and was well received. It is to be regretted that more opportunity was not given for discussion on the cases presented by Drs. Gibson and Yonkers. Such cavalier treatment will not encourage members to undertake the trouble and expense of bringing patients to the association meetings, for no one would be warranted in asking patients to spend their time and money in presenting themselves were there not some hope of an elucidation of their cases by a general discussion. It is to be regretted that the report of the Committee on Ethics was tabled, owing to some irregularity. It will however be taken up early at the next meeting. Toronto is again chosen as the next place of meeting, which, considering its central position, and the better accommodation which may be obtained will be of advantage to the Association. Dr. Henderson's notice of motion for the appointment of a Defence Union Committee is, we think, timely; and we trust that such steps may be taken at the next meeting as will give adequate defence to practitioners proceeded against for malpractice. The election of Dr. Richardson, as President, is a matter of congratulation to the Society. His popularity and well-known zeal in the prosecution of scientific medicine and surgery make him a most acceptable officer. We anticipate for the next meeting of the Association a greater measure of success even than has heretofore attended its proceedings.

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CLINICAL LECTURE.

Delivered at the Montreal General Hospital, March 2nd, 1886.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

(Dean of and Professor of the Theory and Practice of Medicine in the Faculty of Medicine, Bishop's College.

CATARRHAL JAUNDICE.

GENTLEMEN,—The patient now before you is 35 years of age, and is a domestic. She has, as a general rule, enjoyed good health, although occasionally she has noticed evidence of gastric trouble, which she has observed was connected in some degree with changes in the weather. She has considerable washing of clothes, and has to place them on the line in the yard,—I was going to say, for the purpose of drying, while in truth it is to freeze. About two weeks ago, while engaged in this occupation, and the temperature was very cold, having just left a heated kitchen, she felt chilled, and was obliged to desist. She took a drink of warm ginger tea, and felt better, continuing her work for the day. On the following morning, although she resumed her duties in the household, she was feverish and uncomfortable, and as her bowels were somewhat confined she took a purgative, which only acted fairly well. Next day she felt still more uncomfortable, having a decidedly bad taste in her mouth, and, as she noticed the conjunctiva becoming yellow, she came to the Out-door Clinic. This was last Thursday, the 25th inst. Her condition was at that time in brief as follows : eyes, face and body of a decidedly lemon color, frontal headache, foul tongue, pulse of 64, and small, and bowels constipated. Her last motion was sticky, pale and very offensive. The diagnosis was catarrh of the bile ducts or catarrhal jaundice. This is a disease of somewhat common occurrence in Canada, owing to the changeful character of our temperature, especially in Autumn, when we have warm days and cool nights. It is also met with somewhat frequently in the malarial districts of the western portion of our neighboring province. It, as a rule, is not a primary disease,—I mean by this statement that the catarrhal condition does not first attack the mucous membrane which lines the bile ducts. As a rule, there has existed for one or more days evidence of a catarrhal congestion in the gastro-intestinal canal, but more especially in the duodenum, that portion of the intestinal canal which is immediately next the stomach, and into which the bile ducts empty. The disease, as a rule, then, generally extends from the duodenum up the ducts. The initial lesion is a congestion or hyperæmia of the mucous membrane, which becomes swollen, and coated with a tenacious mucus. In this way the canal becomes partially obstructed, in some cases wholly obstructed, so that little or no bile passes into the gut. In about four or five days the congestion begins to disappear, while at the same time a good deal of debris is cast off. This debris blocks up the canal for a short time, but it gradually liquifies, escapes into the duodenum, and once more the duct is clear. The symptoms of this disease, in addition to those which I have named as being present in the case now before you, are a sensation of weight and sore-

ness in the right hypochondrium,—actual pain may exist, but is rare. The spirits are much depressed, and the patient is apt to become melancholy. In fact, the patient feels far more sick than his actual condition, as illustrated by general symptoms, would seem to warrant. The staining of the eyes and skin is noticed about the fifth day, sometimes earlier. Heart's action weak, and is slow and labored. The urine is the color of porter or dark coffee, owing to the quantity of bile, which is being excreted through the kidneys. It also contains the urates in great amount. The urine will stain yellow any linen with which it may come in contact. The coloration of the skin is due to the presence of bile pigment in the transuded liquid, which infiltrates the tissues. Sometimes even the perspiration gives a yellow stain to clothing, especially the perspiration from the axilla. The depressed condition of the circulation is due to the action of the biliary salts on the heart itself. If you will remember the physiological action of bile on the food which it meets on entering the duodenum you will at once understand how certain articles of diet, such as the fats, for instance, pass on, improperly prepared for further action in other portions of the intestinal canal. If you remember the fact that bile possesses strong antiseptic power you will understand how its absence allows the food in the gut to decompose, the result being the formation of a large quantity of abominably fetid gas. This causes much flatulence. The absence of bile causes the stools to be light clay or chalk color—they are pasty, and it often requires much straining to empty the rectum. The skin is itchy, sometimes excessively so—now and then it prevents sleep. In severe cases, when the bile-staining of the skin is very deep, vision is yellow, from the quantity in the humors of the eye. In about 10 days from the first symptoms matters begin to mend, the feverish condition passes away, the tongue cleans and the appetite returns—still the skin continues markedly yellow and the bowels remain constipated. About the fifteenth day the evacuations from the bowel first show evidence that bile is resuming its natural channel by being darker. In a couple of days the normal in this respect is reached—when the fetid odor and flatulence become memories of the past. The skin discoloration is the last evidence of the disease which disappears. Until this takes place there continues to be evidence of bile in the urine.

Generally these cases make a complete recovery, but occasionally you meet with one which, from some cause which you are not able to explain, does not. The jaundice then becomes chronic and there occurs serious organic changes in the liver.

The treatment in the case now before you was very simple. It consisted of the local application of hot linseed poultices over the right hypochondrium, with the internal administration of half drachm doses every four hours of phosphate of sodium. This remedy is in much favor with American physicians. She also got two doses—one night and morning—of Grey powder, *i.e.*, Hydrarg cum cretæ with rhubarb. In this disease mercury is often very useful, not as a purgative or an hepatic stimulant, but for the purpose of allaying the great irritability of the mucous membrane. For this purpose calomel is the best preparation, and should be given in doses of $\frac{1}{6}$ to $\frac{1}{12}$ of a grain. Saline waters, as the Carlsbad, Vichy, Saratoga, and our own Canadian waters—Plantagenet and St. Leon, will be found excellent, with a view of keeping up free elimination from the kidneys. Bitartrate of potash lemonade may be freely used. Two grains of euonymin and four grains iridin given at night, and followed by a saline in the morning, has recently given excellent results. Attention to diet is requisite, as an excess in eating and drinking sometimes produces it. All fatty, starchy and saccharine substances must be omitted, for they require bile either for solution or absorption or to prevent decomposition. Milk, with lime water, especially skimmed milk, makes excellent diet. Conium is also said to be used by some physicians with success

Those who saw this patient when she was here last week will of course recognize a considerable improvement: her eyes are brighter, her heaviness is gone, and the discoloration of the skin is showing marked signs of a rapid disappearance. Her bowels are more readily moved, and in their color there is an improvement. The case has not been a severe one, but it has given me an opportunity of saying a few words on a disease which, when you have commenced practice, will not unfrequently claim your attention.

DRUNKARD'S EPILEPSY.—In view of Magnin's assertion that in France the frequent cases of epilepsy occurring in drunkards are due, not to alcohol, but to absinthe, MOELI has reviewed the German statistics of the subject, which may be thus summarized:

In Germany 36 to 40 per cent. of the subjects of delirium tremens are also victims of epileptic attacks. An attempt to determine whether the occurrence of such attacks was connected with the abuse of any special kind of distilled liquor was unsuccessful, but it was found that in twenty-six almost exclusively beer and wine drunkards, only one was epileptic.—*Centralblatt fur klin. Med.* No. 11, 1886.

Meetings.

MEDICO CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, April 2nd, 1886.

GEO. WILKINS, M.D., 2ND VICE PRESIDENT, IN THE CHAIR.

Primary Cancer of Pancreas, with secondary deposits in other organs.—DR. ROWELL exhibited the specimen, and DR. ARMSTRONG related the clinical history of the case:

Mrs. M., aged 80, widow, enjoyed good health until three years ago. Father and two brothers are said to have died of cancer. Admitted to Western Hospital in December, 1885, suffering from loss of appetite, pain after eating, and vomiting. On examination, a hard, round, circumscribed lump, about the size of an orange, was found occupying the epigastrium, just over the region of the pyloric end of the stomach. As little was to be gained from medical treatment, a mixture containing bismuth, hydrocyanic acid and mucilage was prescribed, and she was removed by her friends to her home. It was learned at the time of her death that since her removal from the hospital the vomiting had continued persistently, the most bland liquids, even water, being immediately regurgitated. She had also suffered much pain, for which she had taken morphia pills. Nothing passed bowels for two weeks before death, and she became distinctly jaundiced. At the post-mortem examination, 36 hours after death, only the abdominal cavity was examined. On opening the abdomen, the omentum was found adherent to the anterior abdominal wall. Liver very much enlarged, extending down to level of umbilicus, and containing several large cancerous nodules. Gall-bladder much distended, containing eight ounces of bile and a dark-colored gall stone the size of a cherry. Upon raising the liver, the head of the pancreas was found to be occupied by a cancerous mass, and the surrounding tissues were infiltrated and adherent to it. The walls of the stomach were free from disease. Complete obstruction of the duodenum occurred four inches from the pylorus, caused by pressure of this cancerous mass, together with the adherent and infiltrated tissues about it. A number of the mesenteric glands were also involved. Intestines empty. Spleen slightly enlarged.

New Method for the Relief of Ruptured Perineum.—DR. TRENHOLME read a paper on this subject exhibiting drawings of the new method as follows:—This disease must be as old as parturition itself, and yet, beyond the adjustment of the parts, binding the knees together, in recent cases no really successful advance had been made for its cure till the late ever-lamented Dr. Sims introduced his silver suture. The operations of Baker Brown and others were not of any real value, and perhaps the cause or nature of failure was not fully brought out till Emmet's paper upon this subject was given to the world. Now, I do not propose to go over the many points connected with this trouble and the operations attempted for its cure. How much progress has been made can hardly be conceived of by those who have graduated during the last twenty-five years. One of the best and most esteemed surgeons of this city, and, I might say, of this country, endeavored to dissuade a confrere from attempting the operation, stating that "it was sure to be a failure." Not only did he do this, but used his endeavors to prevent the lady from having the operation performed. Thanks, however, to the silver suture and the courage of the operator, the operation was successfully performed and the patient cured. This, occurring in our good city, speaks volumes. For my own part, I think the evils resulting from severe lacerations are very great, and if anything I may say will direct more attention to the prevention of these evils, I will be satisfied. I feel confident that the sum-total of the sorrow and misery arising from this cause vastly exceeds our conception. It is a recognized factor in the causation of subinvolution of the vagina and uterus, and I am persuaded its results are not limited to these organs, but that the tubes and round ligaments share in the same mischief. It is a fruitful cause of retro luxations of the uterus and prolapsus of bladder. Of all the marital misery and personal distress I need say nothing; these, of course, vary with the peculiarities of individual cases and the extent of the disease. I will not speak of the well-known preparation of the patient required, especially in extensive lacerations; you all know as to this and the after-treatment also. There is one remark I wish to make as to what is known as the perineal body. Some writers have made light of its existence, because its anatomy and relations are not sufficiently definite to merit, as they think, this appellation. That every uninjured perineum has such a body is unquestionable,

and the restoration of this body is *the one* object of perineoraphy. An operation is successful or unsuccessful, according as to whether this end of the operation is or is not attained—without it the natural support of the pelvic viscera is impossible. Not only is there apt to be hernia of the anterior rectal wall, but prolapsus of both bladder and uterus—and this in the order I have given them. The best success heretofore has followed Emmet's operation. His conception of the trefoil character of the surfaces to be brought together are based upon a right conception of the anatomy of the parts. The perineal body being the central, and the lateral surfaces the outside leaves of the trefoil, each sulcus represents the lateral borders of the vagina and rectum. Perfect union of these surfaces leaves but little more to be desired. What remains to be attained is the object of what I now offer. In the first place, the loss of any tissue is to be avoided, and sure union by first intention the desideratum to be attained. My operation is based upon the recognition of the immense value of the perineal body. I denude the surfaces to the fullest extent of the parts injured. This denudation is accomplished by the removal of the covering of the parts to be denuded —i.e., the cicatricial surface in one piece. For this purpose the first incision is made at the upper part where the edge of the skin coalesces with the cicatricial surface—(the dotted line in sketch No. 1 shows this); the knife is entered at the highest point on the right side, and the incision brought down to the lowest part of the fourchette, when it is met by a similar incision on the left side. The lowest part of the angle is then seized with the forceps and carefully dissected upward, taking special care to remove the whole surface without incising the flap; this dissection is carried on till the surface represented by the original wound is uncovered. This flap, when raised with the hook, is seen in drawing No. 2. The next step is the introduction of the shield-sutures (and here I would say a word in favor of the catgut suture which I adopt.) It is by far the best, as it gives the greatest possible extent of surface to surface—much greater than can be secured by the interrupted or any other suture. Two deep sutures usually suffice, and these—whether silver, silk, or catgut—are passed in and secured by clamp shot upon an ivory shield. The first suture should be inserted low down, and about three-quarters of an inch from the edge of the wound. It must be passed under the denuded surface so as not to appear and brought out on the opposite side at a point corresponding to that of insertion. The second deep suture is similarly introduced higher up. The last deep suture should catch the flap, and the interrupted suture will do for this. The edges of the wound are coapted by horse-hair sutures, and the upper part of the flap and around on the right and left side are secured by catgut sutures; this leaves the united surfaces in the shape of the letter T. The vaginal surface is perfectly covered, and in no way can a drop of fluid enter the wound or interfere with union by first intention. There is very little pain, inasmuch as the deep shield-suture allow of distention. Interrupted sutures should not be used. Where the rupture extends into the rectum the flaps are carefully brought together by a running catgut suture, and the operation completed as in this case. The objection to all other operations was that it left the vaginal incision open, which sometimes, therefore, interfered with union by first intention. By my method this is now impossible, and when catgut is used the results of the operation leave absolutely nothing more to be desired. The following points are gained: Perfect union, perfect restoration of the perineum, no loss of substance, and no after-fever worthy of the name. Sketch 3 shows the condition of the parts at the completion of the operation.

Dr. Wm. Gardner said that, as a rule, extensive lacerations of the perineum were mischievous and produced symptoms, yet he had seen many exceptions to this. In numbers of cases, even where some fibres of the rectum have been torn, no inconvenience followed, due, no doubt, to the integrity of the vaginal walls and to individual peculiarity. He had also seen procedentia uteri in virgins and in multiparous women, where there was no rupture at all. The principle of the method advocated by Dr. Trenholme was not new. Hart and Barber had described a similar operation, but denuding in two segments; and Tait, five or six years ago, proposed an operation similar to Dr. T.'s, with the exception of introducing the sutures somewhat differently. Dr. Gardner had performed this (Tait's) operation twice, but was not favorably impressed with it. Convalescence was not so satisfactory as when he had performed Emmet's operation.

Dr. Armstrong thought that the different degrees of injury resulting from laceration of the perineum in different cases depended upon the character and extent of the tear. He doubted

whether a simple tear or the so-called perineal body which consisted principally of cellular tissue and fat, was followed by much harm. There was good evidence to the contrary. The evil results charged to laceration of the perinæum only obtained when either the pelvic fascia was torn or when the muscular floor of the pelvis was injured, either by a separation of the levator ani muscles in the middle line, or when one or both of these muscles were torn away from their origin from the rami of the pubes or from the ischial spine. This fact is pretty clearly established by Emmet, by Dr. Schatz of Rostock, and by Dr. B. E. Hadia of San Antonio, Texas. The best operation is that which the most perfectly restores the parts to the condition in which they were before the injury was sustained. Emmet's new operation has yielded good results in the Western Hospital. He was not aware that, so far, any attempt had been made to unite the divided muscles in the median line or to the pelvic fascia.

Lanolin.—Dr. Reed made a few remarks on this drug, a new basis for ointments, introduced by O. Liebreich, obtained from the fat of the keratin tissues and principally from wool. The very strong recommendations of this cholesterine fat in the articles in the *British Medical Journal* for February would cause it to be extensively tried by the profession. The advantages of rapid absorption and ready miscibility with aqueous mixtures were in a measure confirmed. Manufactures were preparing for a great demand, and an abundant supply at a moderate price would soon be on the market. A specimen was passed round.

Operation for Intra-uterine Fibroid—Accidental Inversion of the uterus and rupture of the Perineum.—Dr. Gardner reported the case as follows: Mrs.——, childless, was sent to him from Ontario. She had had severe hemorrhages for the past five years; of late they have been very excessive, and produced great blanching. On examination, a tumor was found about the size of a child's head and completely filling the vagina and uterus. *Operation*—The tumor was fixed by an assistant and removed piece by piece by means of scissors, fingers and serrated scoop. Towards the end of the operation, whilst dragging strongly on the remaining portion of the tumor it suddenly gave way, tearing the perineum and inverting the uterus. The uterus was easily replaced, but sutures were not applied to perineum in order to facilitate irrigation and drainage of the uterus. For this purpose Dr. Gardner always employs the double tubes fixed to the cervix. Convalescence proceeded very satisfactorily for five days, when the temperature rose and diarrhœa set in. This condition persists in spite of treatment. It is feared she has amyloid disease of the liver and other organs, the liver being now enlarged and smooth. She is also passing large quantities of urine containing albumen.*

Stated Meeting, May 1st, 1886.

T. G. Roddick, M.D., President, in the Chair.

Tuberculosis of the Tongue.—Dr. Stewart exhibited a woman, aged 28 years, who has been complaining for over four months of cough, purulent expectoration, night sweats, loss of flesh, etc. She has lost a brother and sister from pulmonary consumption. Her father and mother are still living, and enjoying good health. When she first came under observation, three months ago, there was distinct evidence of consolidation of both apices. This condition still continues. The patient is hoarse, and complains of pain in the larynx and also in the throat when swallowing. Dr. Major, who kindly examined the larynx, found a tuberculous nodule about the size of a grain of wheat in the inter-arytenoid space. The tip of the tongue is superficially ulcerated to the extent of about a five cent piece. From the centre of this ulcerated surface a fissure extends into the substance of the tongue to the depth of about a quarter of an inch. The tissues immediately surrounding this fissure are hard and nodular. There is no pain on pressure, however, neither is there any discharge from the ulcerated surface of the tongue. Shortly after the sore on the tongue was noticed, the patient experienced a severe pain in it, which continued to increase in severity up to the time when she first came under treatment, when it had reached such an exquisite degree that she found it almost impossible to eat or even to speak. The local application of iodoform quickly relieved the pain, but otherwise it does not seem to have had any influence over the course of the local trouble. Lately, a half per cent. solution of papayotin in equal parts of glycerine and water has been applied several times daily, the object being to directly influence the tuberculous infiltration, from the well-known properties that this drug has in dissolving albuminous tissues. The case is un-

* She died a week later from pleuro-pneumonia.

doubtedly one of a typical tuberculous ulcer of the tongue. Although the secretion from the ulcer has been examined on two occasions, no bacilli have been found.

In reply to a question raised by Dr. Shepherd as to the influence of iodoform, when used as a local application, in producing pneumonia,

Dr. Major stated that he had used the drug extensively in nasal and laryngeal disease for many years, and he had not, thus far, encountered any untoward result.

Dr. R. J. B. Howard has seen iodoform freely used in Vienna in cases of excision of the tongue, and there it is said to be free from danger.

Eversion of the Laryngeal Ventricles.—Dr. Major presented a case of eversion of both laryngeal ventricles in a male aged 27. The case had been under observation and treatment for over two years, and showed decided improvement. A tuberculous condition was present, as evidenced by lung signs and a local development in the post-laryngeal wall. He referred to a case of complete eversion of the right sacculus, which had been demonstrated at the throat clinic of the Montreal General Hospital in April, 1884, occurring in the person of a syphilitic subject, where the ventricle was completely returned under treatment. Reviewing the literature of the subject, allusion was made to the fact that in the majority of the few recorded cases some dyscrasia was prominent, notably accompanying syphilitic, tuberculous or cancerous disease.

Peculiar Skin Disease of the Feet.—Dr. R. J. B. Howard exhibited a boy, 12 years of age, of healthy family. He has angular curvature, involving the lower dorsal region. First noticed when he was 3½ years old. His feet were first affected in his sixth year. A small "scurfy" spot appeared first on the right foot, and has spread steadily, healing at the centre. When he came to the Dispensary it appeared as a lupiginous patch about 4 inches across, on the right ankle and instep; smaller similar patches existed on the outside of the right little toe and left great toe, at metatarso-phalangeal joint. The patch is covered with a crust or scab of a somewhat papillary appearance. Not tender or painful at any time, and never ulcerated. Dr. Howard brought the case for diagnosis. He thought it was due to some derangement of the spinal cord at the seat of the curvature, as nerves from this region supplied the skin of the feet.

Dr. Shepherd believed it to be a form of lupus.

The President suggested that the parts be poulticed to remove the crust, and the boy be again brought to the Society.

Compound Fracture of both Legs.—Dr. Shepherd presented a case with the following history:—Edward N., aged 33, sailor, on the 11th of September, 1885, whilst working on his ship, fell through the hatchway into the hold, a distance of twenty feet, breaking both his legs. He was immediately admitted to hospital, and on examination, it was found that he had sustained a compound fracture of both legs about their middle third. The wound in left leg was about two inches long, and the fracture was comminuted. The right leg had the soft tissues much lacerated, the wounds being multiple, the largest some 4 inches long. Large pieces of muscle protruded, and there was much riding of bones. After cleansing the wounds with bichloride solution 1–1000, dusting them over freely with iodoform, and covering them with iodoform gauze and sublimate jute, the left leg was immediately put up in plaster, a window being left opposite the wound, some jute being placed over this and kept in place with a gauze bandage. Owing to the size of the wound and amount of the laceration in the right leg, it was thought wiser to put it up in a McIntyre splint, after placing the bones in as good a position as possible. The same evening, owing to the large amount of oozing, the external dressings were renewed, but were not again touched for one month, at the end of which time the wounds were found perfectly healed; the fracture of the left leg was firmly united, but although the extensive wound in right leg had healed, there was no union, so, after rubbing the bones together, it was put up firmly in a plaster-of-paris bandage. From time to time this bandage was renewed, the patient being allowed to move about with crutches. At the present time, seven months after the accident, the patient could walk about without support, and during the next week intended joining his ship. The right leg was still encased in plaster, and although the union was not quite perfect, it was daily improving. There was one inch and a half shortening of the right leg. After exhibiting the patient, Dr. Shepherd remarked that he had now no fear of compound fractures, and that all the cases did well if the wound was thoroughly cleansed

with bichloride, dressed with iodoform and jute dressing, and left undisturbed. Of course, if the temperature rose, it was wise to examine and change the dressing. He considered this a case which a few years ago would have demanded amputation.

Dr. R. J. B. HOWARD said that Esmarch reported a case where there were three compound fractures of the leg, thigh, and forearm. The treatment used was similar to Dr. Shepherd's and a good recovery followed.

Dr. JOHNSTON exhibited the following pathological specimens :

1. *The Cord and Brain* from a case of non-tubercular cerebro-spinal meningitis in a child. Patient was suddenly seized with severe pain in the head and vomiting. A few days before death ecchymotic spots appeared over the chest and arms. The illness only lasted a week.

2. *The Uterus and Heart* from a case of malignant endocarditis in a patient suffering from puerperal fever. Patient did well for the first twelve days after confinement, when she was suddenly seized with rigors, her temperature running up to 105°. Nothing local was found to account for this. There was no pain in the abdomen. The heart showed endocarditis, with vegetations over the valves. The uterus showed signs of septic endometritis. There was also a diphtheritic-looking membrane in the cervix and on the inner sides of the labia. There were infarcts in the kidneys and spleen, but no pyæmic abscesses.

Dr. J. C. CAMERON read a paper entitled

Notes on the Determination and Causation of Sex.

By P. W. P. MATTHEWS, LL.D., M.R.C.S.E., Etc.,

Dominion Coroner for the North-West Territories and Medical Officer of the Hudson Bay Company, etc.

of which the following is an abstract :—

From earliest times, men have been anxious to learn the sex of the fœtus in utero, and for this purpose many quaint methods have been devised. The following aphorisms enunciated by Hippocrates are to this day believed and practised by midwives in the East :

1. If the child be a male the mother will have a good color ; but if a female, a bad color.

2. The male fœtus is usually seated on the right side, the female on the left.

The ancient astrologers directed a drop or two of the mother's milk to be squeezed out upon a clean knife or glass, or upon the finger-nail. If the milk spreads about, the child is a female ; if it remains still the child is a male.

M. Venette, the author of a popular treatise in France, directed that if a son is desired the generative act should be performed when the wind is in the north. Others held that the right testicle secretes female sperm and the left male ; others that the right ovary discharges male ovules and the left female, and directed the woman to lie on the right side during coitus if a male child is wanted. This belief still lingers among some of the Hudson Bay Indians.

Pythagoras thought that a vapor descended during coitus from the brain and nerves of the embryo, the grosser tissues being derived from the blood and humors found in the uterus.

Empedocles affirmed that a portion of the embryo was contained in the sperm and a portion in the germ, the child being formed by the union of the two.

Hippocrates taught that conception takes place in the uterus by the mixture of due proportions of the male and female elements, sex depending upon which is stronger.

Aristotle held that the material parts of the embryo are formed by the catamenial blood, and that the male semen imparts the principal of life when the body is formed.

In later times, Descartes and his followers affirmed that a sort of fermentation takes place when the male and female seminal fluids are mingled, a fœtus being the result ; while, according to the chemical school, the acid male secretion mixing with the alkaline female secretion causes a sort of double decomposition, a fœtus being a precipitate.

In 1667, Ludwig Hamm contended that an immense number of animalcules exist in the semen of all male animals, which contain the perfect rudiments of the future animal, and that the female simply supplies the proper nidus or habitat and suitable nourishment. The discovery of movement in the minute seminal particles seemed to confirm this theory ; while some writers went so far as to say that these animalcules are of different sexes and copulate so as to engender male and female offspring.

Thury of Geneva propounded the doctrine that in animals, males are always produced when completely matured ova are fecundated, and females when the ova are less mature. Thus by serving

the cow with the bull at the commencement of rut, a female calf is produced; by serving at the middle or end of the rut, a male is ensured. In further proof of his theory, he said that queen-bees always lay female eggs first, and males afterwards. Applying this theory to the human female, it has been argued that if the ovum which is discharged from the ovary at time of menstruation, is impregnated shortly after the conclusion of the menstrual period, a female will be the result; but if impregnation do not take place for ten days or a fortnight, the child will be a male. This rule has been briefly formulated thus: *Female* offspring result from *post-menstrual*, *male* from *præmenstrual* impregnation.

The relative age of the parents seems to have some influence upon the sex of their offspring. Mr. Sadler, from an investigation of nearly 15,000 cases, concludes that on an average the sex of the child is that of the parent whose age is in excess, In England the husband is usually older than the wife, and the proportion of live-births is 104.7 males to 100 females. Among illegitimate children, the proportion of males is somewhat higher, 106.3 to 100, probably for similar reasons.

Recently, Mr. Starkweather has published a book on the "Determination and Causation of Sex in Man and the Lower Animals," in which he lays down the law that sex is determined by the *superior* parent. In deciding this superiority, numerous factors are to be taken into account, such as temperament, activity, energy, will, intellect, features, color, physique, health and nutrition. This sexual superiority does not necessarily coincide with superiority as generally understood, nor does it necessarily imply superiority in mental and moral qualities. This theory is an expansion and extension of Hippocrates' dictum, that the parent who is physically more vigorous at the time of conception gives his or her sex to the offspring; or, as Cuvier puts it, "To obtain an excess of female offspring, the father should be young and ill-fed, and the mother of mature years and highly fed."

In 1863, Frankenhauser and others propounded the theory that the rapidity of the fœtal heart varies according to the sex of the child, being greater in the female than the male. In 50 cases he succeeded in diagnosing the sex correctly, finding:

124 = mean male fœtal heart-beat.
144 = " female " "

Steinbach followed with 45 successful cases out of 57, finding:

131 = mean male fœtal heart-beat.
141 = " female " "

Devilliers in France and Cumming in Edinburgh denied the truth of this theory, and maintained that the frequency of the fœtal heart-beat depends upon the size and weight of the child rather than upon its sex. As it is usually slower in large and well-nourished children, and as males are generally larger and heavier than females, a slower pulse-rate in males is usually to be expected. Opinions seem to be contradictory respecting the truth of this theory; my own experience does not corroborate it. One strong argument against it is, that if the pulse-rate of a considerable number of children be taken within one hour after birth, the difference of rate in the sexes will be too slight to admit of any rule being deduced therefrom.

Remarks by Dr. Cameron:

In 1879-80-81 I made some observations which tend to confirm Frankenhauser's theory. McClintock, in the Sydenham Society's edition of Smellie's Midwifery, quotes some observations made by Dr. Frank C. Wilson of Louisville, which are so similar to my own that I tabulate them together as follows:—

Dr. Wilson's Cases.				Dr. Cameron's Cases.			
Fœtal heart-beat.	No. Cases.	M.	F.	*Remarks.*	No. Cases.	M.	F.
110-125	37	35	2	Almost certainly male.....	15	15	0
125-130	15	13	2	Probably "	14	14	0
130-134	12	8	4	Doubtful chances of "	7	2	5
134-138	7	2	5	" " female..	15	5	10
138-143	9	2	7	Probably " ..	19	3	16
143-170	26	2	24	Almost certainly " ..	30	1	29
	106	62	44		100	40	60

The lowest fœtal heart-beat in my series was 98, in a very large male child. From this series of observations, it seems tolerably conclusive that a fœtal heart beat under 130 is generally diagnostic of a male; over 140, a female. To secure accuracy, the following precautions should be taken:

1. Observations should be made before or in the very early stages of labor, for as labor advances the fœtal heart-beat tends to become more rapid or irregular.

2. Several observations should be made, and their mean calculated, for the painless contractions of the uterus frequently modify the fœtal heart-beat 10 20 per minute.

Many failures in diagnosis may be referred to lack of attention to these precautions.

In discussing this question of sex, much confusion has arisen from the want of clear notions respecting menstruation, ovulation and conception. Menstrual flow and the discharge of a mature ovum from a Graafian follicle are supposed to occur about the same time; hence many conclude that these two processes stand in the relation of cause and effect. Although the question is not yet definitely settled, evidence is rapidly accumulating to prove that their coincidence is accidental rather than necessary, and that one process may go on independently of the other. Indeed they are essentially opposite in character: ovulation is *progressive*, being the preparation and discharge of ova fit for impregnation; menstruation is *retrogressive*, being essentially a retrograde metamorphosis of the soft decidual nest prepared for a previous ovum. It has, therefore, been aptly called "the funeral obsequies of defunct and disappointed ova."

Physiologists tell us that after a ripe ovum has been expelled from its Graafian follicle, its germinal vesicle becomes nuclear and approaches the surface. A portion is eventually extruded from the egg in the form of the Polar Bodies, leaving the remainder to form the *female pronucleus*. The ovum then ceases to grow unless speedily fertilized, perishes, and is cast off. But if spermatozoa reach it in time and penetrate its substance, it does not perish; the heads of the spermatozoa detach themselves and become *male pronucleus*, which fuses with the female pronucleus to form the fertilized nucleus. Conception is said to have taken place and growth is thenceforth rapid. Morphologically the male and female pronuclei are closely allied, both being derived from the primitive ova of early embryonic life. In the female, a primitive ovum develops into a permanent ovum, capable of producing a human being; in the male, a primitive ovum breaks up into a number of spermatozoa. That the sex of offspring must be due to the relative properties and powers of these male and female pronuclei is tolerably clear, but to what properties or what powers is not quite evident. The essential points of Starkweather's theory are the following:

1. The male and female element share equally in the determination of sex.

2. Sex is determined by the superior potentiality of one or the other.

3. The superior parent or element (at the time of fruitful intercourse) determines the opposite sex in the offspring—cross heritage, as it has been called.

4. In the great majority of cases, it is possible to prognosticate the sex that will result from the union of certain parents.

5. The sex of offspring is or might be generally within the control of parents.

6. This law holds good for the lower animals as man.

He cites numerous life histories in support of his theory, such as Milton, Shakespeare and Sir Thomas More, and dwells upon the well-known fact that great men have usually great mothers. He holds that his theory accounts for the small excess of male births among western nations, the marked excess of females among mulattoes, and the temporary large excess of males after war, pestilence, etc. In certain families, too, there has been noticed a remarkable succession of sons in one generation, of daughters in the next, and of sons again in the next. These cases are explained as examples of cross-heritage, the sex being determined by the superior opposites. In the controversy aroused by Starkweather's book, frequent appeals have been made to the experience of stock-breeders, both for and against his theory. On the whole, the evidence seems to be against the ability of man to control sex among the lower animals. Yorkshire men, the most experienced breeders in England, and probably in the whole world, have no confidence in their power of predetermining the sex of horses and cattle although it would be very much to their pecuniary advantage to be able to do so, but are confident that they can modify, develop, or eliminate any other physical quality to an almost unlimited extent.

Starkweather's theory is ingenious, and contains much truth, but is yet far from proven. As our knowledge and experience increase we may know more of nature's methods, but it is highly improbable that we will ever gain the power to regulate sex, for such power would be prejudicial to the best interests of the race. During countless ages, the diversity of man's environment, the unceasing struggle for existence, the survival of the fittest, and the gradual development of the race have continually, through barbarism and civilization alike, determined those laws of reproduction which were from time to time most conducive to man's welfare. Nature's experience is greater than ours; her wisdom, patience and unselfishness are greater than ours; her balance more justly equipoised than ours. But, though we cannot supplant her, we may learn important lessons by observing her methods. The careful study of sex-formation should throw much light upon the mysteries of heredity, and enable us to foresee, and possibly forestall, many family taints or predispositions. The knowledge that a grandfather's peculiarities are liable to be propagated through his daughters to his grandsons should help us to grapple with such diseases as dipsomania, hæmophilia, or gout.

If, in any degree, it be true that the superiority of the parent is a powerful factor in determining the sex as well as the strength of the offspring, it must be equally true that the deterioration of the parent will cause deficiency or deterioration of the opposite sex in the succeeding generations. If, then, the modern craze for the "higher education of *women*" goes on unchecked till their physical powers are sacrificed to so-called mental culture, the prospects for coming generations of *men* will be dark indeed, and Miltons or Shakespeares will be well-nigh impossible. But nature's unerring balance eventually rights all things; the enfeebled progeny of weak, neurotic parents inevitably succumb before the vigorous offspring of the healthy and robust, for the fittest must survive.

Correspondence.

OUR LONDON LETTER.

The central attraction for the medical man visiting London is her hospitals and medical museums. Whether they "do these things better in Vienna," as the Teutonophilist says they do, remains to be seen; but there can be no question about the great advantages here open to the student who will avail himself of them. The endless amount of material that comes to hand in the various general and special hospitals makes it possible to study all diseases in all shapes.

I have noticed that very few students or attachés of one hospital know much about the service of other institutions, and you can accordingly easily understand how difficult it is for one having less than six weeks to devote to study here to acquire more than a superficial notion of the relative merits of the numerous teachers and clinics with which London is studded. However I shall give you my impressions, such as they are, with the assurance that the men and things whereof I speak were personally investigated.

I have been frequently told that in this city and its suburbs professional competition is very keen, and that the good old days of the guinea fee are going quickly by. Also, that in the lower stata of professional life private dispensaries where medicine and advice can be had all the way from a shilling to half a crown are not uncommon. In spite of these statements my intercourse with all sorts and conditions of practitioners here does not lead me to believe that life is any harder with them than in our colonial towns. I am certain of this, that they are a more *leisurely* class. Whether that be due to the phlegmatic style of doing things which everywhere contrasts with our nervous American routine I am unable to determine, but I am sure we have something to learn from our English brethren in this respect. Probably the first thing in respect of disease that strikes the stranger is the large proportion of rachitic, tubercular and scrofulous affections that one daily sees in the Out-patient Departments as well as in the wards of all the hospitals.

I am inclined to believe that syphilis is more frequent than we have it, and I am sure skin troubles are in greater variety, if not in greater proportion, than in Canada.

Barlow, of the great Ormond St. Hospital for children, stated the other day that of all *post-mortems* held there tubercle is found in the proportion of 60 per cent. We have not far to look for the causes of this state of things. London is one example of the rule that the poverty and misery of a city are in inverse proportion to its wealth. Bad and insufficient food, close unventilated houses, narrow streets, foul air,—all these combine to pro-

duce types of disease which—let us be thankful for it—have not as yet invaded our shores. Again the London climate, with its fogs and concentrated essences of all that is vile in the way of volatile organic odors must in certain seasons of the year be very inimical to the health of those whom necessity compels to live in the older parts of the city. If this be true, nothing also can be more admirable than the numerous plans adopted to cleanse and purify the by-ways and lanes of the town. The difficulties in the way of efficient drainage, ventilation and water-supply are enormous, and one continually wonders not that he occasionally encounters dirt and mal-odors but that in this endless collection of cities of all ages and all degrees of enlightenment called London he meets in with so little mal-hygiene. If you will pardon my want of arrangement in this straggling letter I wish to say something about children's hospitals. Besides mixed hospitals for women and children, and the great general hospitals that all admit children, there are at least eight special institutions where infants and children alone are treated. Of these probably the Evelina, in Southwark, where Drs. Goodhart and Taylor are the physicians and Messrs. Howse and Clement Lucas the surgeons, and the hospital for sick children in Gt. Ormond St., are the chief. In the latter clinics are given by Dr. Barlow, Mr. Howard Marsh and several others. Life in London bears heavily upon the children of the poor, and the pallid faces and warped bodies of the little patients suggest C. L. O. ferruginous tonics and good nursing as eloquently as the additional special treatment may be indicated by a closer examination. One sees Sayre's apparatus in nearly all the wards, but I think I am right in saying that it is *rarely* used for spinal curvature. Putting the child to bed for several months, tonics, good food, etc., are the indications. One of the teachers in the Great Ormond St. Hospital took the ground that, whatever else it might do in the way of keeping the child quiet, or of assisting to support the back, it did not succeed in keeping the diseased surfaces of the bones apart, and consequently failed to accomplish what was first claimed for it. The patience and quiet demeanor which are exhibited in crowded streets and entertainments by the English people are reflected in the manners of those who are obliged to take advantage of hospital treatment. There is very little argument or explanation or persuasion employed to induce a patient to undergo an operation or to follow this or that line of conduct. I have rarely seen an applicant do other than follow the precise direction of the physician or surgeon. It seems to me that, apart from the phlegmatic temperament of the average hospital patient, such a state of affairs speaks well for the profession, and indicates a confidence in its members which does not obtain everywhere.

The façades of nine-tenths of the London Hospital buildings proclaim the fact that they are "supported by voluntary contribution," and, with the exception of very old institutions like Guy's, St. Thomas' and St. Bartholomew's, which own large estates in various parts of the country, they all "are in want of funds" and some of them (Guy's, for instance) feel the pressure of diminished land values and have had to shut up some of their wards in consequence.

Although the Austrian and German system (where a patriarchal government furnishes the needful) is said to be superior to this, there is something more in keeping with the spirit of this, the best republic in the world, that the people should, from a sense of their inherent value, give directly to these charities.

It would be equally as impossible for me to describe within the limits of a few letters the internal management of each hospital as it would be to give you an idea of the abilities and teaching powers of the many eminent physicians and surgeons that attend them. However, if I say anything at all about the latter, I presume I am right in still regarding Sir Joseph Lister as *primus inter pares*. A kindly, almost diffident, old gentleman with a well cut good face, is he. He is still a regular attendant upon that institution in Lincoln's Inn which has given the world so many celebrated surgeons—King's College Hospital.

He seldom uses the spray with which his name is connected, but he took good care to impress upon us that it was necessary in such cases to exercise all the more care in other respects. He is now experimenting with a new antiseptic with which many of the wounds in his wards, surgical and otherwise, are being dressed. Lister's treatment of goitre is to cut down the tumor, and with a smooth-edged scoop remove the *interior* of the gland, which in this particular situation is not well supplied with blood. Antiseptic dressings are applied and the shrinkage of the gland cures the goitre. Lister's bandages, gauze, wool, etc., are now colored with aniline blue which is discharged

when touched by blood serum, liquor puris, or other alkaline fluid, and in this way evidence is at once afforded, without entirely disturbing the dressing, as to whether redressing is required or not. He uses the mixed silk or cotton elastic bandages where pressure is needed over a wound, and nearly always where we would employ the simple cotton bandage. Drs. Lionel Beale, Burney Yeo and W. S. Playfair (the well-known obstetric writer) are in active attendance here. A bluff surgeon, still young in energy, though old in knowledge and getting old in years, is Mr. John Wood of "radical cure for hernia" fame. And it must be acknowledged that, from what can be seen upon any of Mr. Wood's days of attendance there, one cannot but admit the desirabilty of operating in such cases as Mr. Wood himself would choose. Here, too, Mr. Hy. Smith uses his own clamp and cautery for the removal of hemorrhoids—a friendly common-sense man whom one cannot follow without benefit. No visitor to London should omit from his programme at least two museums (although there are many others)—that of the Royal College of Surgeons in Lincoln's Inn Fields and the splendid collection of wax casts in Guy's; and if he will so arrange his visit to the latter hospital during Mr. Bryant's hours he will encounter a surgeon who is worth listening to. Here, too, attend Drs. Pye, Smith and Galabin, with Messrs. Golding Bird, Daires, Colley, and others equally well-known. Guy's hospital has attached to it obstetric wards where, in this land of rachitis, one can witness more Cæsarian sections, craniotomies and cases of deformed pelvis in one month than would be seen in the Lying-in hospitals of Canada during a year. The Out-door attendance upon the poor women of the South Thames region about London Bridge must be of great value to students of Guy's. It has been remarked with too much truth that London clinical teachers suffer from *aphonia*. Of course I shall not here mention names, but it is inexpressibly aggravating when one has crossed the Atlantic to "sit at the feet" of some medical or surgical Gamaliel to find that he speaks in a whisper and cannot be heard without the assistance of an ear trumpet. I could mention the name of more than one of world-wide fame, the sound of whose voice does not reach the average ear if it be placed more than two feet away from the speaker's head. A man may be a very Solomon for wisdom, but he might as well speak to an audience of deaf-mutes as attempt to give bedside instruction in a whisper. No such accusation can be brought against Dr. W. R. Gowers, the shining light of the National Hospital for the paralysed and the epileptic. Dr. Gowers always has a large following of graduates principally, and his Out-patient Clinic is an admirable one, and should not be missed by the visitor to London. The building itself is a beautiful structure, and its situation on a quiet, shady side of Queen's Square is all that can be desired. For those who would make a further study of nervous diseases, there are the hospital for paralysis and epilepsy in St. John's Wood, and the clinic of Mr. Hughlings Jackson at the London Hospital. I must not forget the well-known names, in this connection, of Dr. Charlton Bastian and Dr. Ferrier, both physicians for out-patients, at the Queen's Square Hospital. One can *revel* in skin diseases here if he is so inclined. Skin departments of the general hospitals, special hospitals and dispensaries are crowded with cases.

I would recommend specially the Out Clinic of Dr. Liveing at the Middlesex Hospital, Dr. Stephen Mackenzie at the London Hospital, that of Dr. Radcliffe Crocker at the University College Hospital, and the Evening Clinics of the attendants upon St. John's Hospital for diseases of the skin in Leicester Square. I do not personally know anything of the Skin Hospital in Blackfriars, but the names of Messrs. Jonathan Hutchinson, Waren Tay, and J. F. Payne are among the attendants, and are a guarantee that the material is properly worked up. Sooner or later the majority of medical stragglers here reach the far off London Hospital, Whitechapel Road, situated in the midst of the poorest part of the city, "where it can do most good." There is nothing prepossessing about its exterior; it has nothing of the architectural beauty or delightful situation of St. Thomas', and cannot boast either the landed wealth or hoary associations of St. Bartholomew's or the aristocratic support of St. George's, but it probably has more beds constantly filled than any of these and more varied material than any one of them, while, for teaching, the Clinics of Mr. Treves and Dr. Stephen Mackenzie are largely attended and cannot be exceeded. Mr. Treves is especially attractive, with his pleasing manner, good delivery, conciseness of method and success as an operator. Sir Andrew Clark does not now attend here very regularly, and Mr. Jonathan Hutchinson's term of twenty years has expired. Among the other attendants are Dr.

Henry Sutton, Dr. Gilbart Smith, Dr. S. Fenwick (the author of the admirable little book on Diagnosis) and Messrs. Rivington and McCarthy. Diseases of women have not received as much attention here as in America, partly, perhaps, because in the latter country the other sex are more prone to their peculiar diseases than in England, and, as a consequence, the average English practitioner is not as conversant with the technology of the gynecological art as we are.

However, besides the gynecological department of most of the Lying-in and General Hospitals there are several institutions devoted entirely to gynecology. I speak particularly of the hospital for women in Soho-Square and the new hospital for women, Marylebone Road. I had a short time ago the pleasure of seeing, during the course of the same afternoon, abdominal sections by two extremists as regards Listerism. They took place in the Samaritan Hospital, near Portman Square, where visitors from all parts of the world are cordially welcomed. We signed the usual "antiseptic contract," and first saw Dr. Granville Bantock remove a large subperitoneal myoma of the uterus. There was nothing specially noticeable about the operation, except that chloroform was given throughout *and antiseptics were entirely omitted.* Dr. Bantock kindly explained that the fluid in which his sponges, instruments, hands, etc., were washed was plain unadulterated tap water, and that he did not employ any kind of antiseptic. He claimed that he has had a larger share of successful cases since giving up the spray and the so-called antiseptics, and referred us to his well-known article on carbolic acid poisoning in abdominal surgery. In a room below we saw Dr. W. A. Meredith remove an ovarian tumor amid a cloud of carbolic mist, surrounded by towels dipped in germicide solutions, and assistants glistening with sublimated dew. He washed his hands in carbolic lotion every few minutes and made the peritoneal toilet with unusual Listerian care—and we left wondering. To an ignorant Colonial like myself it occurred to me that the truth probably lay somewhere between these two extremes. The Samaritan is the hospital where Mr. Knowsley Thorton operates, and to which Sir Spencer Wells was formerly actively attached. The course in gynecology at the Soho-Square Hospital is said to be an admirable one, and under the direction of men like Mr. Mansell-Moulin, Drs. C. H. Carter, Edmund Holland and Mr. Reeves the student should learn readily the elements of English gynecology. The student of diseases of the eye can have ample scope for his surplus energies in any of the Opthalmic or General Hospitals of London. I can only speak from personal experience of that fine institution in Moorfields, the Royal Ophthalmic, where Mr. Tweedy, Mr. Lawson and Mr. John Couper were in attendance, and where there appeared to be unlimited run of cases accessible to the student. Affections of the ear are usually treated here with throat troubles, a much more sensible idea than the usual association with the eye. The charity rendered famous by the labors of Dr. Morell MacKenzie is called The Hospital for Diseases of the Throat, and is situated in Golden Square, and is well worth a visit. On Gray's Inn Road is the Central London Throat and Ear Hospital of which Mr. Lennox Browne is chief surgeon.

I regret that, owing to his illness, I was unable to see Dr. Green, the author of the "Pathology" although I haunted Charing Cross Hospital, of which he is one of the physicians. From what I have seen of the work done in the *post mortem* room here I do not know that either in their use of material or in the practical application of it for teaching purposes we have much to learn from the practical pathologists that I have seen.

Specialism has an entirely different significance here from that form of it which one encounters in Canada. Speaking generally, while the profession here is distinctly divided into surgeons and physicians it is not sub-divided into oculists, aurists, and throat doctors, nerve doctors and gynecologists. The man who devotes his time to one special group of diseases does not do so to the exclusion of the others, nor does he inaugurate his new departure in life by affecting to forget all his previous experiences of other departments of medicine and surgery. Indeed I have on more than one occasion heard a well-known specialist here declare his satisfaction at the advantage and help he derived in his special line from his general practice. And this has always seemed to me the proper antidote to the growing evils of specialism. The human organism is not a collection of isolated organs and structures but a correlated system making up a "harmonious whole," and should be treated as such.

Many of the names familiar to us as household words are disappearing from the active hospital list, and are rarely seen within hospital walls. As

consultants in medical societies, and as writers of books and contributors to periodicals they are best known to the profession. Among many such are Sir James Paget, Sir Henry Thompson Sir Prescott Hewett, Mr. Jonathan Hutchinson, Dr. Russel Reynolds, Sir Wm. Jenner and Mr. LeGros Clark. Yet in their green old age many other celebrities still lead an active hospital life. Mr. Timothy Holmes still teaches at and attends St. George's; Dr. Pavy at Guy's; Dr. Playfair is still physician accoucheur at King's College Hospital; Drs. Wilson, Fox, Sydney, Ringer and Mr. Christopher Heath can be found at University College Hospital, and so on. I have been politely and kindly received at all the medical institutions here although I have doubtless been set down as an average specimen of a "walking interrogation point with the dyspepsia"—the formula by which the American visitor is sometimes designated. I hope before leaving England to give you an account of the meeting of the British Medical Association in Brighton where I hope to see a number of Canadian confrères. Dr. Holmes told me that he must leave here in time for the meeting in Quebec of the Canada Medical Association, of which, as you know, he is President. Mr. Fowke, General Secretary of the former Association, suggested to a few members of the Canadian contingent here that the C. M. A. should become a branch of B. M. A. How does that strike you?

C. A. W.

London, July 6th, 1886.

Progress of Science.

ON THE TREATMENT OF PAINFUL MENSTRUATION AND STERILITY FROM FLEXION.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Goodell, M. D.,

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Gentlemen: While our patient is getting her ether in the waiting room, let me give you her history. It is a history which will soon be to you as familiar as household words, whether you practice in cities or at cross-roads. She is a young woman who has been married eight years; but she has never conceived, and since puberty has suffered from very painful menstruation. Since her marriage, her periods, as is usual in such cases, have been getting more and more painful. At present, not only are they unbearable, needing large doses of opium, but she is yearning to become a mother.

Now, what lesions shall we probably discover in this case? Ten to one, a womb bent forward on itself, and a narrow uterine canal. True, the displacement may turn out to be a retroflexion, but this is a lesion almost peculiar to the child-bearing womb, while anteflexion is the natural condition of the nulliparous womb. Here let me disabuse your minds of a prevalent error, viz: that anteflexion in itself is a pathological condition. Many text books speak of this flexion as a lesion, and exhibit many forms of pessaries devised to rectify this so-called displacement. But in the great majority of cases neither anteflexion, nor, for the matter of that, anteversion, is pathological. In almost every unmarried or barren woman you will find the womb either bent forward or tilted forward, and resting on the bladder; for this, in varying degrees, is its natural position. The mistake made is in attributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so liable. But the kinship between the brain and the bladder is a remarkably close one. This has lately been studied by two Italian physiologists, Mosso and Pellacani, who go so far as to contend that "every mental act in man is accompanied by a contraction of the bladder." The irritability of the bladder is then one of the first symptoms of loss of nerve control. Everybody is liable to it. You, on examination day, will be annoyed by it. Many a lawyer before pleading an important case, and many a clergyman just before delivering a discourse, is compelled from sheer nervousness, to empty the bladder. So it is with the lower animals, which, when frightened, micturate involuntarily. A nervous bladder is then one of the earliest phenomena of nervousness. Now a hysterical girl, or a woman whose nervous system has collapsed under the strain of domestic cares, consults a physician for such symptoms of nerve prostration as wakefulness, utter weariness, a bearing down feeling, backache, and perhaps, above all, an irritable bladder. Upon making a digital examination he, of course, finds the fundus of the womb resting on the bladder, and at once jumps to the conclusion that the whole trouble is due to the pressure of the womb on the bladder, viz: to the existing anteflexion, or to the anteversion as the case may be. He now makes local applications, and racks his brain to adapt or to devise some pessary capable of overcoming the supposed difficulty, forgetting that the upward or shoring pressure of the pessary on the bladder must be greater than the corresponding downward, or gravity, pressure of the womb. There is, in fact, no pessary but the dangerous stem-pessary which can meet the end without pressing upon a fold, or double thickness, of the bladder. But, very fortunately, anteflexion is not often pathological. It is certainly not pathological in the foregoing instances; for the symptoms, especially the vesical ones, are not due to the pressure of the womb upon the bladder, but to

sheer nervousness, or nerve prostration, which is the thing to be treated, and not the womb. There are exceptions to this rule, but not many. For instance, a womb, heavy from involution, or from the presence of a fibroid, may make uncomfortable pressure on the bladder.

If anteflexion is the natural position and condition of the womb, when is it pathological? It is pathological whenever it is the cause of dysmenorrhœa or of sterility. Usually dysmenorrhœa and sterility are associated, but occasionally the latter is the only symptom; for it is evident that the crooked womb can more readily expel fluid contained within it than admit a fluid outside of it. The phenomena of a typical case of dysmenorrhœa from anteflexion or from retroflexion, are as follows: At the outset of menstruation the first few drops are somewhat painful. The pain then increases in severity until, reaching its acme, a sligh gush of menstrual fluid takes place, followed by a lull in the sufferings. The pain then gradually increases until it culminates in another gush. The meaning of this is, that the bend in the womb imprisons the menstrual fluid, which goes on collecting in the cavity until the swelling up of the comb straightens out the bent portion, dilates the narrow canal, and allows the pent-up contents to escape, just as the coils of a hose first swell, and then straighten out before the water can flow through them. Relief from pain lasts until the fluid begins again to collect. This is called stenosis from angulation.

Sometimes a girl has little or no pain at her menstrual periods. She marries, does not conceive, and by and by dysmenorrhœa sets in, which goes on increasing. What is the explanation of this? It means that the flexed canal of the womb was originally just large enough to permit the slow escape of the menstrual fluid, but that the congestions from sexual intercourse have caused a thickening of the lining membrane of this canal, which has narrowed its calibre. Then, again, the uterine efforts to force out the pent-up fluid cause the various tissues of the womb to hypertrophy. We see this also in unmarried women, the dysmenorrhœa increasing with their age. Nature intends that the periodical congestions of the womb should be interrupted by pregnancy and lactation, and without these interruptions the mucous lining of the womb is liable to thicken, and by its thickness to narrow the canal. If then, to these menstrual congestions be added the sexual congestions of marriage, this hypertrophy is greatly increased, and the barren wife suffers more than the old maid.

But here comes our patient. Let me examine her. Sure enough, she has an anteflexion, for through the anterior wall of the vagina I feel the body of the womb resting upon the bladder. The cervix is long and conical, the os externum very small.

I pass the sound. It stops, as you see, at the internal os—viz: at the beginning of the bend—and I can not cause it in any further. By introducing the speculum and straightening the womb by traction made with a tenaculum, the sound now goes in, but even yet with difficulty. It gives a measurement of nearly three and a half inches, which is a large measurement for a young woman who has not borne any children. This hypertrophy is owing partly to such repeated congestions as I have just described, and partly to the muscular effort made by the womb to extrude not only the menstrual fluid, but its mucous secretions.

Now, what is the remedy for this condition? For a number of years the operation most in vogue was the cutting, or bloody operation of Sims. By it the canal is enlarged by incisions. But the objections to this plan are, that it is a dangerous operation, having caused the death of many patients through peritonitis, that it is not a very successful operation, as the incisions are liable to heal up and the dysmenorrhœa return; and finally that it always deforms the cervix, and sometimes causes lesions analogous to those resulting from a natural laceration during the labor. I shall not, therefore, burden you with the details of this operation which, fortunately, is falling into disuse. Then, again, the cervix, is, at the present day, often dilated by tents, or by graduated bougies; but the former is dangerous, and both are painful, tedious, and unsatisfactory.

The operation which I can recommend to you most highly, and one which I shall now perform on our patient, is that of forcible dilatation. The instruments which I use are two modified Ellinger dilators of different sizes, made under my supervision by Messrs. J. H. Gemrig & Son, of this city. Ellinger's model is the best on account of the parallel action of the blades, which dilate the whole track of the canal uniformly. The smaller of these dilators has slender blades, and it pilots the way for the other, which is more powerful, having blades that do not feather. The lighter instrument needs only a ratchet in the handles, but the stronger one should have a screw by which the handles are brought together. Lest the beak should hit the fundus uteri, and seriously injure it when these instruments are opened, their blades are made no longer than two inches, and are armed with a shoulder which prevents further penetration. The larger instrument opens to an outside width of one and a half inches, and its blades are roughened, or corrugated, by shallow grooves, in order to keep them from slipping out. The dilator has also a graduated arc in the handles by which the divergence of the blades can be read off.

In a case of dysmenorrhœa, or in one of sterility from flexion or from stenosis, as in the woman before us, my mode of performing the operation of dilatation is as follows: The patient is thoroughly anæsthetized, and a suppository containing one grain of aqueous extract of opium is slipped into the rectum. She is then turned on her

back and drawn to the edge of the bed, each knee being supported by an assistant. The light must be good, so that the operator can see what he is about. My bivalve speculum being now introduced, the vagina is well swabbed out with a five per cent solution of carbolic acid. By the aid of a strong uterine tenaculum the cervix is steadied, and the smaller dilator is introduced as far as it will go. Upon gentle stretching open that portion of the canal which it occupies, the stricture above so yields that, when the instrument is closed, it can be made to pass up higher, Thus by repetitions of this manœuvre, little by little, in a few minutes' time a cervical canal is tunneled out which before could not admit the finest probe. Should the os externum be a mere pinhole, or it be too small to admit the beak of the dilator, it is enlarged by the closed blades of a pair of straight scissors, which are introduced with a boring motion. As soon as the cavity of the womb is gained, the handles are gradually brought together, and allowed to stay for one or two minutes. The small dilator being now withdrawn, the larger one is introduced and the handles are then slowly screwed toward one another. If the flexion be very marked this instrument after being with drawn should be reintroduced with its curve reversed to that of the flexion, and the final dilatation then made. But in doing this the operator must take good care not to rotate the womb off its axis and not to mistake the twist for a reversal of flexion. The ether is now withheld, and the dilator kept *in situ* some fifteen minutes, when it is closed removed, and the vagina well syringed out with the same solution of carbolic acid. Occasionally a slight flow of blood will last for several days after the operation, stimulating the menstrual flux. Often the flux is precipitated, or it is renewed, if the operation follows or precedes it too soon. The best time for dilatation is, therefore, midway between two monthly periods. Were the case before us a retroflexion, I should, after the dilatation, put in a pessary long enough to span the ankle of flexure. This never fails to straighten ot the womb, and in time to restore it.

Although this operation looks like rough work when compared with the neat but dangerous cutting one, the patient will probably need not more than two suppositories, and she will complain merely of soreness for one or two days. To forestall any tendency to metritis she will be kept in bed until all tenderness has disappeared. Pain will be met by rectal suppositories of opium, and by large poultices laid over the abdomen. From this operation I have seen only slight pelvic disturbance, but it has always been readily controlled and has not given alarm. In one case of dilatation, complicated by a fibroid of the womb, a uterine colic lasted for several days, but it was finally subdued by asafœtida in large doses, and never became inflammatory. Should the temperature rise, and symptoms of pelvic inflammation appear, the ice-bag should replace the warm poultice. But I have not yet met with a temperature high enough to need this energetic mode of treatment.

In the great majority of cases I dilate the canal not to the fullest extent of the larger instrument, but, as in the case before us, to one and a quarter inches. Sometimes, in an infantile cervix, which does not readily yield, and might give way, the handles are not screwed closer than three quarters of an inch or an inch, but this is exceptional. Tearing of the cervix has happened in four of my cases—in two from the sudden slipping out of the beak, and in two from sheer stretching. Three of these were unmarried, and the cervix of each was split posteriorly, nearly half-way to the vaginal junction. The rent looked exactly like the incision of the cutting or bloody operation, but it was only half the length of the latter. As it kept the os externum patulous, and could not do any mischief, I did not sew it up. The fourth case was that of a multipara, whose uterine canal had been nearly closed up by applications of silver nitrate, made by her physician, with the view of curing what he supposed was an "ulceration of the os," but which was a bilateral laceration. The tissues, rendered cicatricial and brittle by the caustic, were torn by the dilator for about half an inch on the right side. Here the hemorrhage was free enough to need styptic applications and a light tampon. I could have stopped it by wire sutures, but this was not done, as it would have defeated the object of the operation.

For slight dilatations, such as for the office treatment of anteflexions and of stenosis, or for the introduction of the curette, or of the applicator armed with cotton, the more delicate instrument is quite strong enough, and an anæsthetic is not needed. I also use it in women who object to taking ether, but the operation is then very painful, and it has to be repeated several times, while the results are by no means so good as when the canal has been dilated by the larger instrument and under ether. Occasionally in virgins, in order to save the hymen I have dispensed with the speculum, and have dilated with the more slender instrument, passing it in along my finger, but this can not always be done, and it is usually unsatisfactory. I was led to this because, on one occasion, I was asked to give a certificate of virginity—in other words, to write and sign a paper stating that before the operation the hymen was intact. I also had to do this in the case of an unmarried woman, whose perineum, in spite of lateral cuts, was badly torn in my efforts to deliver with the obstetric forceps a very large fibroid tumor of the womb. When she returned home the village crones got up such a buzz of scandal that I had to go to her defense. Sometimes, in a very sharply anteflexed womb, the dilator can not be made to pass the os internum. This difficulty is overcome by first passing in a surgeon's probe, and then, along it as a guide, the dilator.

After a forcible dilatation under ether, the cervical canal rarely returns to its former bent or former narrow condition. Since lateral extension of elastic bodies antagonizes their length, the cervix shortens and widens, and the exudation provisionally thrown out by the submucous lesions sustained by the dilated part serves still further to thicken and stiffen its tissues. In other words, the stem-like neck of the pear-shaped womb is shortened, widened, strengthened, and straightened. Hence for straightening out anteflexed or congenitally retroflexed wombs, and for dilating and shortening the canal in cases of sterility, or of dysmenorrhœa arising from stenosis, or from a conical cervix, the dilator will be found a most efficient instrument. Sometimes, in sharply-bent wombs, I put in a stem-pessary immediately after the dilation. In retroflexions I always put in a pessary long enough to span the angle of the flexion, so as to straighten the womb by making pressure on the fundus. To this occasionally a stem pessary is added.

In its results this operation is not an infallible one. I have thrice been obliged to repeat the dilatation, and would like to do so in several cases did the women permit. In a very few cases I have been forced, as a final resort, to nick a pinhole os externum. But I had not then learned how far I could safely stretch open the uterine canal, and the operation of dilatation was, therefore, not so efficiently performed by me as it is now through a larger and riper experience.

It is not to cases of sterility or of dysmenorrhœa only that rapid dilatation should be limited. As before stated, I use it to stretch open the canal for the admission of the curette and of tents, or for the purpose of making applications to the uterine cavity. In cases needing irrigation of the uterine cavity, I first dilate the canal with the slender instrument, and introduce the nozzle of the syringe between the separated blades. This gives a free avenue for the escape of the liquid, and robs of its dangers this form of intrauterine medication. I also resort to the dilator in order to explore the womb with the finger. For instance, in a given case of menorrhagia, in which a polypus or some other uterine growth is suspected, in order to avoid the delay and the dangers inseparable from the use of tents, I put the woman under an anæsthetic, and after the rapid dilatation of the cervical canal to the utmost capacity of the instrument—viz., one and a half inches—am enabled to pass my finger up to the fundus. This is accomplished either by drawing down and steadying the womb by a volsella forceps fixed on to the anterior lip, or, in thin subjects, by forcing the womb down upon the finger through suprapubic pressure on its fundus. In this way I have, over and over again, at one sitting, discovered a uterine growth, twisted it off, and removed it. Usually in these cases more difficulty has been experienced in removing the polypus, or other growth, through the narrow canal, than in twisting it off from its uterine attachment. It often has to be wire-drawn before its removal can be effected, and sometimes it will be found needful to enlarge the os uteri by a few nicks. Usually, when the menorrhagia has been free, the cervical tissue is so lax that, after dilatation, the index-finger can penetrate the canal and reach the fundus, but sometimes only its tip can be made to pass the os internum. Yet even this limited degree of penetration is commonly quite enough to decide the presence of an inside growth. If it be not enough, I invariably search for the growth with a small pair of fenestrated forceps, and I have repeatedly seized and removed one, the existence of which was merely suspected. After such operations the uterine cavity and the vagina are thoroughly washed out with a two and a half per cent solution of carbolic acid.

I am sorry to say that I have not kept full records of all my cases of rapid dilatation. For instance, I have rarely tabulated office cases of dilatation, in which ether was not given. Nor has any note been made of cases in which dilatation was performed under ether for curetting, for digital exploration of the endometrium, or for the removal of uterine growths. I have tabulated merely cases of dysmenorrhœa, in single or in married women. In the married, with but three exceptions which will be noted in the proper place, painful menstruation was associated with sterility.

Including all the cases of dilatation performed under ether, I must have had nigh three hundred and fifty cases. I have limited myself to these cases because the use of an anæsthetic implies full dilatation—one in which serious injury, if ever, would most likely be sustained; yet there has not been a death, or a case even of serious inflammation, in my practice, and the results have been most satisfactory—far more so than when the cutting operation was performed by me.

Let me read to you a brief abstract of the statistics of my cases of dysmenorrhœa: Of single women there were one hundred cases; of married, one hundred and nineteen, making in all two hundred and nineteen. Of the unmarried, twenty-four were unheard from after the operation, leaving seventy-six from which any data could be obtained. Of these, forty-five cases were virtually cured, twenty-four more or less improved, and seven were not at all improved. Of these seven that were not benefited by the operation, five subsequently had their ovaries removed—one of them by another physician, and four by myself; of the latter, one died. In each one the ovaries had become so changed by cystic or by interstitial degeneration as to make the dysmenorrhœa otherwise incurable. Of the twenty-four improved, there was one on whom oophorectomy was also performed; for, although the dysmenorrhœa was partly relieved by dilatation, ovarian insanity and menorrhagia were not. The operation was a successful one, and my patient was not only cured of her hemorrhages, but she regained her reason. Out of these cases, the

majority, although not wholly cured, were greatly improved. For example, one of them was formerly bedridden during the whole period of her menstrual flux, and had then to take large doses of morphia. She also suffered at those times from hæmatemesis and epistaxis. Since the operation she experiences pain for merely two hours, needs no anodyne, and has lost her octopic hemorrhages. Her gain in health and flesh has been great. Another one, who was wholly crippled by her sufferings, and made nervous by the dread of them, is now a busy nurse. For one hour at every period she suffers acutely, but not enough to overcome her dread of taking ether and of having a second dilatation performed.

Of those cured, two had had Sims' cutting operation performed previously without benefit, and were afterward dilated; three were dilated a second time before a cure could be effected. The word "cured," in some of these cases, does not mean that the women were wholly free from any pain whatever, but that they did not suffer sufficiently either to go to bed or to take any stimulants or anodynes. The history of several cases merit more than a mere allusion. The sufferings of one of my patients, at every monthly period, has always been great, but while she was at boarding school they grew so excruciating as to cause furious delirium at those times. This finally culminated in permanent insanity, with suicidal impulses. While in this condition she was placed in my hands. After rapid dilatation of the cervical canal, the dysmenorrhœa wholly disppeared. The exemption from pain toned down some of her more extravagant delusions, but she did not wholly regain her reason until a few months afterward. She is now free from all menstrual pain, and is in the complete possession of her mental faculties.

A Hebrew lady, whose health had suffered from dreadful dysmenorrhœa, was so greatly improved by one dilatation that her physician and her friends were amazed at her rapid restoration to health. Not long afterward the doctor asked me to perform the same operation upon another one of his patients, who was, if anything, worse. Her sufferings were so severe that he wrote, "I fear that another period might kill her," and urged an immediate operation. The cervix in this case was conical and very dense. Fearing a tearing of the parts, I screwed the instrument very slowly up to one inch and a quarter, and kept up this amount of dilatation for twenty minutes. The cervix did not sustain any injury. The canal has since stayed open, and she is free from all menstrual pain. Another case was that of an unmarried lady, sent to me from a distant State, whose sufferings at her periods were so great that morphia, however administered, was not potent enough to allay them, and her nervous system became very much shattered. Finally, at her last monthly, she was compelled to have two physicians in attendance on her, who took turn about in administering chloroform night and day for forty-eight hours. This experience decided them to send her to me. One dilatation of an inch and a quarter wholly cured her.

Of the married, sixty-nine were heard from. Of these, forty-seven were virtually cured, eighteen improved, and four unimproved. Out of these sixty-nine cases, eleven were not in a condition to conceive—four of them from fibroid tumors of the womb, two from destructive applications of silver nitrate to a torn cervix, three from being over forty-one years of age, and one from being a widow. This leaves but fifty-eight capable of conception, and of these, eleven, or about nineteen per cent. became pregnant. But the ratio is, in fact, larger, for I know that several of my patients, fearing pregnancy, employed preventive measures after the operation, and I suspected several others of doing the same thing. Then, again, I believe that yet others, who consulted me merely for painful menstruation, have not reported their subsequent pregnancies. For instance, of the eleven cases of pregnancy, five came to my knowledge incidentally, and not directly from the ladies themselves. It is not much more than a year ago that I learned, by the merest accident, the subsequent history of a clergyman's wife, whose cervical canal I had dilated six years ago. She had been making up for lost time by giving birth to twins within a year after the operation, and later to several other children. She had been married eight years before she came to me, and had had her cervical canal dilated by tents and siit up with Peaslee's metrotome by a skillful surgeon.

One word more: While you can expect much from this operation whenever it is for dysmenorrhœa caused by flexion or stenosis, you can not be so sanguine with regard to its results in sterility. The reason of this is, that sterility, associated with dysmenorrhœa, often leads to such tissue changes in the womb as in time to make it incapable of forming a nest for the ovum, which, therefore, either escapes or perishes.—*Medical News.*

SAFE, SIMPLE, AND EFFECTIVE MODE OF TREATING PROLAPSE OF THE RECTUM AND HEMORRHOIDAL TUMORS.

Dr. Q. C. Smith thus writes in *Gaillard's Medical Journal:*

By the method here proposed I have treated three cases of prolapse of the rectum and about a dozen cases of hemorrhoidal tumors.

The cases of prolapse of the rectum were all the result of parturition, and two of them were, or appeared to be, complete, *i.e.*, all the coats of the bowel had passed out through the external sphincter.

These cases of rectal prolapse and hemorrhoidal tumors were treated by injecting into the tissues with the hypodermic syringe an eight-grain solution

of muriate of cocaine, plus an equal volume of phenol sodique.

The quantity of this solution injected varied from twenty minims, in small hemorrhoidal tumors, to one ounce in prolapsed rectum.

One injection was sufficient to cure hemorrhoidal in all my cases, while two to four trials were found necessary to cure prolapsed rectum. The syringe point was introduced at the most prominent point of the tumors—large or small—and thrust boldly to the most vascular part of their base, and a liberal portion of the solution deposited, according to the size of the tumor. Then the balance of the tumor was well saturated with the solution. After injecting hemorrhoids no topical treatment was applied, except a daily wash of dilute solution of boric acid, as hot as could be borne. After injecting prolapsed rectum a mild antiseptic healing salve was applied. The following formula was found very efficient;

℞ Iodoform, in *fine* powder,
Balsam Peru,
Oil of camphor,
Oil of sassafras, aa ʒ ss.
Pine tar,
Castor oil,
Powdered aloes, aa ʒ j.
Subnitrate of bismuth enough to make a stiff salve.

S.—Apply thoroughly twice a day, and cover with a soft cloth.

Before applying the salve each time, the parts were well washed with the syringe, soap suds from Packer's tar soap, as hot as could be borne, being employed for the purpose.

In addition to whatever general internal treatment may be indicated in any given case, I am in the habit of directing, with excellent results, something like the following:

℞ Fl. ext. witch-hazel ʒ ss.
Sat tinct. horse-chestnut ʒ j.
Muriate of ammonia, ʒ j.
Glycerine, ad ℥ iv.
M. ft. sol.

S.—A teaspoonful three times a day, just after meals, on alternate days.

℞ Muriate of hydrastin, gr. xxiv.
Ergotin, gr. xij.
Ext capsicum,
Ext. ipecac.,
Aloin, aa gr. vj.
M. Make 24 pills and silver-coat.

S.—One pill three times a day, just after meals, on alternate days.

These last two prescriptions should be administered regularly, on alternate days, as long as the hemorrhoids or prolapse give trouble, and for several weeks after they have ceased to do so.

For bringing hemorrhoidal tumors to view, O'Neal's rectal speculum was found most convenient, though in some cases Woodward's and Sims' rectal speculums served a good purpose. After operation on hemorroids patients were allowed to attend to their ordinary business at pleasure, and a majority of them did so.

The cases of prolapsed rectum were confined to bed until cured, which was in the mildest cases about two weeks, and in two severe or complete cases about four weeks. They were then allowed to move gently about the room, but the patients being parturients, the horizontal posture and quietude were doubly indicated. No general anæsthetic was found necessary in any of these cases, as the operations produced but little pain or subsequent soreness. No inflammatory reaction followed the injections.

I have used various medicaments for injecting hemorrhoids, all with more or less success, never having met with any deplorable results; but the eight-grain muriate cocaine solution, in connection with an equal volume of French-made phenol sodique, has proved the best that I have tried.

In conclusion, the writer begs to state that he is familiar with what has been published in reference to this subject in standard and periodical literature for the last twenty years, and hence claims no originality in the treatment outlined in this communication.

COLD BANDAGING OF THE LEG IN INSOMNIA.

Dr. Von Gellhorn has found the following plan very useful in inducing sleep in persons who suffer from insomnia. A piece of calico, about eighteen inches wide and two and three-quarter yards long is rolled up like a bandage, and a third of it wrung out of cold water. The leg is then bandaged with this, the wet portions being carefully covered by several layers of the dry part, as well as by a layer of guttapercha tissue, and a stocking drawn on over the whole. This causes dilatation of the vessels of the leg, thus diminishing the blood in the head and producing sleep. It has been found by Winternitz that the temperature in the external auditory meatus begins to fall a quarter of an hour after the application of the bandage, the decrease amounting to 0.4° Cent., and the normal not being again reached for from one and a half to two hours afterwards. The author has employed this means of procuring sleep, for a couple of years and finds it especially useful in cases where there is congestion of the cerebral vessels. Sometimes he has found it necessary to reapply the bandage every three or four hours, as it dried.—*British Med. Jour.*

HYDRASTIS CANADENSIS IN METRORRHAGIA.

Dr. J. A. Akuloff, of Wilna, details (*Wilna Medical Society*) the case of a married woman, aged 42, who had been for nine years suffering from profuse flooding occurring every two weeks. Treatment by intra-uterine injections of perchloride of iron and subcutaneous injections of ergotin had

wrought no improvement. On examination, there were found dilatation of the cervical canal, enlargement, hardness, and impaired mobility of the womb, considerable distention of the cervical veins, and numerous easily-bleeding erosions scattered over the whole mucous membrane of the cervix. Fluid extract of hydrastis Canadensis, in doses of twenty minims three times daily, was given for about three months. The first catamenia were yet profuse, lasting about ten days, but subsequently they returned only once a month and lasted each time three days, the amount of blood being moderate. A decrease in the bulk of the womb was also noted at the end of three months' treatment.—*London Medical Record.*

TO ARREST NASAL HEMORRHAGE.

We take the following practical suggestion of Prof. John Chiene, from the Edinburgh *Medical Journal:*

In persistent hemorrhage from the nasal cavity, plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as completely to prevent any air from passing through the cavity in the act of breathing. This simple means, if persistently tried, will in many cases arrest the bleeding. The hemorrhage persists because the clot which forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in attempt of the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position and the hemorrhage is checked.

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MONTREAL JULY, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS OF THE PROVINCE OF QUEBEC.

A special meeting of the Board of Governors was held July 13th, 1886. Present: Drs. Lemieux (President), Belleau, LaRue, Simard, Lachapelle, P. E. Mignault, R. P. Howard, Parke, Leprohon, Kennedy, Durocher, H. A. Mignault, Marmette, Guay, De St. George, Hart, Rodger, Lanctot, George Ross, Austin and Campbell.

Reports of Assessors from Laval and McGill Universities were read and adopted.

Drs. Delaney and John Howe, graduates of Laval, Quebec, on presentation of their diplomas, received their licenses.

The report of the preliminary examination in May last was read, showing that the following gentlemen had passed: Messrs. Arthur Baribault, Rodolphe Chevrier, J. A. Charette, Frs. Desrosier, Emile Dumont, W. S. England, Paul Gagnon, Chs. Gerard, John Hayes, Edmond Huot, Henri Lanciaux, Theodule L'Ecuyer, L. E. La Roche, G. E. Le Sage, L. de Martigny, Pierre Lussier, Frs. Marchand, J. L. G. Mason, C. D. Meikle, Oscar Mercier, G. L. McKee, C. E. Morin, L. A. Noel, J. O. Poitras, Edmond Provencal, Euclide Rainville, Hector H. Roy, F. Serres, L. St. Germain, F. E. Thompson, L. V. Vezina, E. A. V. Villeneuve, Armand Bedard, T. Belanger, Ant. Brossard, L. M. F. Cypihot, Jules Dandurand, Joseph Desy, A. U. Dorais, Henri Fortier, E. Laurin, F. Lavoie A. Lecavalier, Jos. Lemai, Chs. Lemaire, J. A. Magnan, Jos. A. Rene, F. Richard, L. Robillard, Edmond Savard, A. Taillefer, J. C. P. Tasse, Chs. Vezina, Jos. A. Bedard.

The Secretary then read the report of the committee as published. A minority report was then read, when it was decided to take up the original report, and discuss it, clause by clause.

The College first decided in the affirmative that it was decided to have a Central Board of Examiners.

Clause 1 was amended to read as follows:—

The Board shall be known as the Central Board of Examiners, and shall consist of two (2) examiners on each subject. That the examinations shall be made in the language of the candidate, provided that the two examiners shall have the right to examine alternately, and when they disagree, the examination on the subject shall be taken before the full committee.

Clause 2, so as to read, "The Central Board of Examiners shall consist of two representatives from each medical school, and an equal number not connected with any school."

Clause 3 was amended so as to correspond to the amendment in clause 2.

The remainder of the report was carried with the following alterations:—

1. The Central Board shall meet alternately in Quebec and Montreal.

2. The preliminary examination to be held once a year, on the first Wednesday in July, in Quebec and Montreal alternately.

3. Graduates in Arts not exempted from the preliminary examination.

4. The Board of Governors to meet annually on the second Wednesday in May, alternately in Quebec and in Montreal.

The triennial meeting was held May 14, 1886. About 150 were present,

The minutes of last meeting were read and adopted. Dr. E. P. Lachapelle presented his annual statement.

Dr. Lemieux, President, addressed the College on the work done by their Governors during the past three years.

Dr. Fortier objected to some items of expenditure, and moved, seconded by Dr. Laberge, that the Secretaries prepare annually a statement of the work done by the College, and have it printed and a copy sent to each member of the College. This was lost. The College at one p.m. adjourned till two p.m. At two p.m. the College again met, and the following gentlemen were named Scrutineers—Drs. Kennedy, Beaudry, Faucher, Brunelle, W. Mount, L. Mignault, J. B. Gibson, S. Duval, C. S. Parke, Chartrand, Guay, Lanctot, L. LaRue and Hurtubise.

It was announced that the ballot would close at four p.m.

The Secretary for Montreal read the report adopted by the Board of Governors the previous day.

Dr. Cotton moved, seconded by Dr. Norman A. Smith, "That each judicial district be granted power to elect a Governor of the C. P. and S.P.Q. and that each said judicial district elect its representative. Carried.

A motion of Dr. Marcil, seconded by Dr. Durocher, as follows, was carried:

"That the preliminary examination for the study of medicine comprise, in future, the subjects of physics, chemistry and philosophy. That this preliminary examination be held on the second Wednesday in July of each year."

Moved by Dr. Dagenais, seconded by Dr. Brosseau: "That the primary and final examinations shall be held on the second Wednesday in July in each year."—*Carried.*

At ten minutes past six o'clock the Scrutineers announced the result of the ballot to be as follows:—

City of Montreal.—Drs. T. A. Rodger and J. L. Leprohon.

District of Montreal.—Drs. H. A. Mignault, J. A. Duchesneau, J. B. Gibson, D. Marcil, F. D. Lafontaine, N. H. Ladouceur, A. Longpré, and J. E. Turcot.

City of Quebec.—Drs. A. G. Belleau, L. LaRue, R. T. Rinfret, A. Watters, C. S. Parke, and E. A. de St. George.

District of Quebec.—M. Guay, F. Fortier, E. Rousseau, F. E. Grandbois, L. H. Labrecque, Hon. T. Robitaille, and A. Laferriere.

District of Three Rivers.—Drs. Hon. J. J. Ross, Badeaux, and Desaulnier.

District of St. Francis.—Drs Austin, Paré, and Thomas LaRue.

The College then adjourned.

MEETING OF THE NEW BOARD OF GOVERNORS.

The new Board of Governors then met, and elected the following officers:

President, Dr. W. H. Hingston (Montreal); Vice-President for Quebec, Hon. Dr. Ross (Quebec), re-elected; Vice-President for Montreal, Dr. J. L. Leprohon (Montreal); Treasurer, Dr. E. P. Lachapelle (Montreal), re-elected; Registrar, Dr. L. LaRue (Quebec), re-elected; Secretary for Quebec, Dr. A. G. Belleau (Quebec), re-elected; Secretary for Montreal, Dr. F. Wayland Campbell (Montreal), re-elected.

The following Assessors were named:—

McGill University—Hon Dr. Church and Dr. P. E. Mignault.

University of Bishop's College—Drs T. A. Rodger and H. A. Mignault.

Laval University, Quebec—Drs. Simard and Sewell.

Laval University, Montreal—Drs. Marcil and Gibson.

Victoria University—Drs. A. C. MacDonnell and O. Raymond.

A committee, consisting of Drs. Lemieux, George Ross, Hingston, F. W. Campbell, E. P. Lachapelle, Rodger, Belleau, and de St. George, were appointed to prepare amendments to the existing Medical Act, in accordance with the report adopted by the Governors at the special meeting on the 13th July and the resolutions passed at the Triennial Meeting.

CANADIAN MEDICAL ASSOCIATION.

The nineteenth annual meeting of this the Dominion Association will take place at Quebec, on the 18th and 19th of August. We hope to see a large attendance. In the absence in Europe of Dr. Stewart, the Secretary, Dr. James Bell of Montreal, is kindly preparing the duties of that office. Arrangements for reduced rates for those attending the convention have been made. Certificates entitling to those reductions can be had from Dr. Bell. The following papers have been promised :

(1.) Heartclot, Dr. Osler, Philadelphia.

(2.) The Medical Jurisprudence of Crime and Responsibility, Dr. D. Clarke, Toronto.

(3.) Trachœotomy in Membranous Laryngitis, Dr. Bell, Montreal.

(4.) Diabetes Mellitus, Dr. Thos. Dupuis, Kingston.

(5.) The Treatment of Biliary Calculi, Dr. J. Ferguson, Toronto.

(6.) The Inhibition of the Heart in Diphtheria, Dr. Gardiner, London.

(7.) "Alexander's Operation" and the Treatment of Displacements of the Uterus, Dr. A L. Smith, Montreal.

(8.) Excision of the Elbow Joint, Dr. Roddick, Montreal.

(9.) The Treatment of Tuberculous Glands of the Neck, Dr. Fenwick, Montreal.

(10.) Myelo-sarcoma of the Arm—Amputation at the Shoulder-joint, Dr. Fenwick, Montreal.

(11.) A Case of Pelvic Abscess, Dr. Alloway, Montreal.

William H. Vanderbilt had the notion that New York ought to be the medical centre of the country, and about 18 months ago he gave the College of Physicians and Surgeons $500,000 for the expressed purpose of buying grounds and erecting buildings. The family soon became imbued with Mr. Vanderbilt's interest for the Medical College. Mr. Vanderbilt's daughter, Mrs. Sloane, gave a maternity hospital to the institution. The Vanderbilt Clinic, the result of the last donation of $250,000. is the joint gift of the four sons.—*Phila. Bulletin.*

NEW YORK MEDICAL MONTHLY.

We have received the first number of the above Journal issued in May last; it is to be published monthly, as the name implies, at the astonishingly low rate of one dollar per annum. In the field of Journalism there is always plenty of room, especially when the object is practical illustration. The well-known names appended as contributors should ensure its Editor every success, which we trust it will have no difficulty in obtaining.

WYETH'S LIQUID MALT.

This is a very elegant preparation of the Extract of Malt, which has been put on the market by the well-known firm of John Wyeth & Bro., of Philadelphia, and which seems to supply a long-felt want. The numerous cases in which Malt Extract has proved useful has brought it into great demand. To some persons the semi-solid character of the preparation has been a decided objection. In such cases the liquid extract would seem to be the very preparation desired.

PHILADELPHIA MEDICAL ITEMS.

During the last five years the Medico-Chirurgical College which was chartered by the Legislature in 1850, has been located at the south-west corner of Broad and Market streets. The needs of this rapidly developing institution have outgrown its present quarters, and for some time the trustees have been looking for more commodious buildings. Recently they concluded the purchase of a large property on Cherry street near Logan square. The location is most excellent for the intended purpose; being near the centre of the city and yet sufficiently retired to give students and hospital patients the requisite quietude. The lot is 134 feet square. It is partly occupied by two large and substantial brick buildings, three stories high with good light on all sides.

Extensive alterations will be made, including the construction of an amphitheatre, clinical lecture room, laboratories and dissecting room, besides all the departments of a well appointed hospital. The lecture room will be fitted up with an eye to the comfort of the students, individual chairs replacing the benches usually supplied. The rooms for practical work will have all their fittings of the latest and most approved pattern. The hospital wards will overlook and have easy access to the large garden attached. Plans for the alterations are now being prepared by the architect, and when finished the corporation will have

one of the most complete college buildings in the country.

Within the ample bounds of the newly-acquired property will be located the following institutions:

1. The Medico-Chirurgical College, founded in 1850.

2. The Medico-Chirurgical Hospital, chartered in 1882.

3. The Philadelphia Dental College, now at 10th and Arch streets.

4. The Hospital of Oral Surgery, whose clinics have no rival in that specialty, has coalesced with the Medico-Chirurgical Hospital.

5. The Philadelphia Hospital for skin diseases, now at 923 Locust street, which will also be continued at a department of the above-named institution.

The grouping of several institutions with allied objects in a single organization is a new feature in the history of Philadelphia Medical Charities. The old simile of a fagot in a bundle of sticks is most opposite here. While each retains its individuality and independence of action, the union permits each to assist the others and, by avoiding duplicate expenses, enables the authorities of each to accomplish more with the funds at their disposal.

Several notable changes have lately taken place in the Faculty of the Medico-Chirurgical College

Prof. Wm. H. Pancoast who for 27 years has been teaching anatomy at the Jefferson Medical College has resigned his professorship in that institution and has accepted the same chair in the Medico-Chirurgical College to which he was elected by the trustees. He brings with him the extensive Anatomical Museum collected by himself and his father, which for so many years was employed in teaching the classes at the Jefferson College.

Dr. John V. Shoemaker, lately Lecturer on Dermatology, and teacher of Skin Diseases, in the Post Graduate Course at the Jefferson College, has become Professor of Dermatology, at the Medico-Chirurgical.

Dr. E. E. Montgomery, Obstetrician to the Philadelphia Hospital and Surgeon to the Women's Hospital, has been elected Professor of Gynecology.

Some other changes of interest to those who wish the old-time reputation of Philadelphia as a Medical Centre to be maintained will be found in the annual announcement of the Medico-Chirurgical College, which will soon be published.

CORRESPONDENCE.

When I landed on the sacred soil of Great Britain I expected among other things to find professional advertising a *rara avis* among the respectable class of medical men, but I have been somewhat disappointed. At least it was certainly unfortunate that in the first town where I inquired into the status of the profession (Mallow, in the South of Ireland) I should run across a printed circular setting forth the qualifications prizes, testimonials, etc., of which one of the principal doctors in the neighborhood was stated to be the happy possessor.

Nor is that sort of thing confined to the smaller towns of Ireland. It is not an uncommon thing even in Dublin and London to encounter magnificent door-plates setting forth the qualifications of the owners, and within a stone's throw of my lodging house a "D. Sc and M.R.C.S." sign on the door of a very respectable surgeon can easily be read half way across the square upon which it fronts.

I am told that competition reaches a height of which we know nothing in America, and yet it seems to me that neither Surgeon nor Physician is as tied down here as in Canada. If it be more difficult to acquire a practice in the larger centres here it is easier to manage and control it when once obtained. This is evident from the way in which a practice may bought and sold—a thing which cannot be done in Canada. And certainly it does argue well for the confidence which the public here entertain for the profession when they allow their right to choose their medical attendant to be bought and sold in this way.

I had a practical experience of the institution called "Hospital Saturday" in Belfast. On the afternoon and evening of a recent Saturday young girls were stationed on the principal street corners of that city soliciting aid for this charity. It was a sort of open-air bazaar, except that one got nothing but a smile for the cash, which, unless he desires to consider himself a "brute," was certain to be transferred from one's pocket to the basket of the fair one who stood in the way of the passer-by.

Here in London they reach the sinner's pocket through the medium of the churches, leading an outsider to imagine either that religious fervor is a more potent opener of the purse-string than it

is in Belfast, or that it is a more feasible plan. Hospital Sunday last year yielded £35,000, a sum which, as Cardinal Manning said in a recent speech, is very small when the numbers and wealth of the donors and the importance of the objectare considered. The meeting lately held at the Mansion House was for the purpose of devising some plan whereby the amount of subscriptions and contributions could be increased. Mr. B. Carter on behalf of the medical profession explained that there were over 100 hospitals and dispensaries in the city, most of which were dependent entirely upon voluntary contributions, and the science of medicine and surgery was largely the result of studies pursued within the walls of these institutions. In fact, said Mr. Carter, there would be no science of medicine without hospitals, and even if patients did not come to them voluntarily it would be a good investment if the community were to pay them for coming.

I quite fell in love with the Edinburgh Royal Infirmary. It reminds me, in point of situation, ventilation and general arrangement, of the Boston City Hospital. It has one of the largest and best-lighted operating theatres that I have yet seen and taken altogether, is a model hospital for patient, teacher and pupil. They tell me that the service of the Infirmary is very largely attended.

In Dublin the Rotunda is the centre of interest for the medical man, but I was attracted more by the museums of the Royal College and of Trinity College.

If they had a good catalogue available to the student, I think they would favorably compare with the average school museum of the London Hospital.

The central object of interest to medical men visiting Dublin is the Rotunda or Lying-in-Hospita[1]. The building is circular, and by no means new. Every thing about the building is clean, and arranged so that the antiseptic treatment of accouchments can be thoroughly carried out. Solutions of carbolic acid and corrosive sublimate are freely used, and the results are manifested in the small number of deaths occurring in the practice of the hospital.

A goodly number of Canadian students and graduates are here, either on pleasure or for purposes of study. Among the latter I may mention Drs. McDonnell, Stewart, Dawson, McConnell, De Cow, Armstrong and Finlay, of Montreal, with Dr. Fulton of Toronto, Allan, of Vermont, Miner, of London, and a number of others. In my next I hope to be able to say something about the various hospitals here, the men that attend them, and the impression which they made upon me. That is unless the festivities of the "season" and the chances for dissipation which it is just now the fashion to offer so freely to Colonials does not render me incapable of calm judgment.

C. A. W.

London, June 21st, 1886.

NEW APPLICATION OF IODOFORM.

Dr. Richmond, of Greenock, Scotland, writes to say that he has cured a very severe case of diphtheria by means of iodoform only. It was applied to the patches on the palate and the fauces (with a camel-hair pencil moistened with mucilage) three times a day. The child also inhaled vapor of iodoform whenever he shewed croupy dyspnæa breathing, and was invariably relieved by it. The vapor was produced at the *lowest possible temperature*, so as not to change its chemical properties. The child was unable to swallow for two days previous to being seen by the Doctor, and within half an hour of the application of the iodoform he was able to take a drink of milk and afterwards continued to drink with ease. The tongue became clear, and remained so. The child got three teeth during his illness (which lasted thirteen days), and was slightly salivated towards the termination of the complaint. However, the salivation was little more than might take place in a perfectly healthy child, in teething. He never fevered, the muscular nerve twigs were not affected, consequently had no paralytic symptoms, and is now in good health.

Dr. Richmond has also been using iodoform with marked benefit in the treatment of various other complaints, viz., phthisis, erysipelas, herpes, burns, scalds, etc.

The phthisical patients inhale it frequently during the day, and all express themselves as having received general benefit. The Doctor thinks the magic power of the iodoform chiefly consists in its sedative properties acting on the inflamed nerves and their twigs. It has arrested tissue destruction at a stage that former experience would have said was impossible.

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(WRITTEN FOR THE CANADA MEDICAL RECORD.)

REPORT ON THE ETIOLOGY, AND THE PREVENTIVE VACCINATION OF YELLOW FEVER.

By DR. L. GEFFRD.

Late Surgeon to the Interoceanic Canal Company at Panama, S. A.

Translated from the French by Dr. Wolfred Nelson, late of Panama, S. A.

Whence comes yellow fever, how does it propagate itself, and what is our etiological knowledge of its nature? Can that knowledge produce some prophylactic means or measures, easy to apply and sufficient to give absolute protection against this formidable plague?

Such were the problems that I had undertaken to solve after my arrival on the Isthmus of Panama. I shall now briefly give the results of my experiments and studies:

I.

In the month of June, 1882, in a report to the Superior Agent of the Interoceanic Canal Company resident in the City of Panama, S. A., I had the honor to inform him, that I had found in the blood of yellow-fever patients, some microscopic organisms,—some filiform, others resembling a string of beads (*chaplets*), and, lastly, brilliant little bodies. That the organisms were constant in appearance, and could thus serve as elements for diagnosis.

After some trials and a great many failures I succeeded in isolating the microbes, and obtained them in great quantity without the human body, by artificial cultivation, in liquids suitable for their nutrition and reproduction.

I was then enabled to study the mode of existence of the microbes. If one observes the filiform bodies attentively for a given time he perceives in their transparent and homogeneous substance, a series of small corpuscles, that refract light more than the other parts of the microbe. Little by little these corpuscles arrange themselves around a central axis or core, giving the organism the appearance of a string of beads (*chaplet*. This French word signifies the string of beads "told" by devout Catholics while praying). Soon other changes follow, the string-like formation separates and in place thereof nothing remains but a mass of brilliant little points. The size of little points is about the thousandth of a millimetre. These corpuscle germs have great resistance. *They do not perish by drying, and can after many years serve to propagate the disease, by regenerating the filiform bodies, when placed under favorable conditions.*

But what *rôle* can we attribute to the microbes in the production of yellow fever? To elucidate this question I have had recourse to experiments on animals. At the beginning of my work I experimented on a number of rabbits, later with dogs, poultry, rats and monkeys, but these animals did not show any predisposition to the disease.

At length a result was obtained by inoculating a guinea pig with half a *gramme* (a *gramme* is equal to 15 1-3 grains) of blood taken from the heart of a man an hour after his death from specific yellow fever. The animal sickened and after two days' fever died in great agony.

At the autopsy on the little cadaver, I found the characteristic lesions of yellow fever, shown with sufficient clearness to establish the identity of the disease, notwithstanding the difference in the organisms.

These direct inoculation experiments were repeated a great many times, the same results were produced in nine cases out of ten. The cadaveric lesions were always the same.

Examinations of blood taken from the ears of a guinea pig suffering from the disease invariably gave the same results, *i.e.*, the recognition or presence of the same microbe met with in man suffering from specific yellow fever.

Having thus established that yellow fever was transferable by inoculation, or vaccination from man to the guinea pig, it became easier to study the *rôle* of the microbe itself in the production of the disease.

More animals were inoculated with the culture liquids peopled with the microbes. They all died in the same manner, presenting the same symptoms as those infected by the direct inoculation of blood.

The periods of incubation in the various experiments declared themselves with varying phases in from one to nineteen days. Figures that correspond with those resulting from observation of the disease at Panama.

As a whole, the knowledge acquired by the experiments just related may be summarized thus :

1st. Yellow fever is a disease that is always characterized by the presence in the blood of the patients of a special microbe, which can be multiplied outside of the bodies of men or animals, by artificial culture.

2nd. The microbes give birth to germs endowed with great resistance to destructive causes, and are capable of reproducing the disease.

3rd. Yellow fever can be transmitted to a guinea pig by the inoculation of blood in its sub-cellular tissues.

4th. Finally, the animals inoculated with cultures charged with the parasites, contract yellow fever and die. Post-mortem, the same lesions are found as in those directly inoculated with blood.

II.

VACCINATION.

"In 1880 M. Pasteur discovered the first in-"stance of a disease, produced by a special mi-"crobe, which, by special treatment, could be de-"prived of a part of its virulence, and that fowls "could be inoculated with it, without danger. By "using the attenuated virus, the disease could be "communicated to fowls, and after a light attack "they were protected against the fatal disease.

"Later, several microbic diseases were recog "nized or defined. Their microbes having the "same properties.

"M. Pasteur, with marvelous sagacity, could not "help but remark that the process which had ena-"bled him to lessen or attenuate the action of the "microbe of chicken cholera, ought to be a pro-"cess of diminishing or attenuating the virulence "of microbes generally that cause other diseases."*

Such were the antecedents that encouraged one to search out a method for attenuating the microbe of yellow fever. In my experiments already related I noticed that three of the inoculated animals that were dangerously ill recovered. That circumstance permitted me to submit to experimental proof, the important theoretical problem, as to whether they were still susceptible to the yellow fever poison. The three guinea pigs were re-inoculated some time afterwards to demonstrate if they were susceptible to the disease *de novo*. They did not present any abnormal symptoms after the inoculation, nor the slightest elevation of temperature.

Thus, we should admit in principle that yellow fever cannot be taken anew. And in this again the experiments were in perfect accord with clinical observations.

This fact accepted rendered my later experiments perfectly legitimate in the alternation of the virus of yellow fever poison for the production of a vaccine-virus capable of protecting man against the terrible effects of the disease.

The problem, thus stated, to me seemed susceptible of receiving a favorable solution by following in the steps traced out with so much perfection by M. Pasteur, in his search for the virus of charbon or malignant pustule.

This *savant* showed that he easily could obtain microbes of various degrees of virulence. From the deadly virulence, that is to say, that killed one hundred times in a hundred the animals experimented upon, such as guinea pigs, rabbits and sheep, passing thence by a number of intermediate steps down to the most inoffensive attenuation of the virus. The method of preparing this atten-

* Chamberland de la Vacination Charbonneuse.

uated or lessened virus thus becomes one of marvelous simplicity.

My conjectures were confirmed by experiment, and now, after the usual experiments, trials and inevitable reverses, I have obtained the microbe of yellow fever in different degrees of attenuation which can be reproduced indefinitely by cultivation.

A guinea pig inoculated by this attenuated virus not only runs no danger of death from the inoculation itself but is placed beyond the dangers and death that invariably follows the injection of virulent blood in animals that have not been protected by the preventive vaccination, or inoculation.

The illustrous savant whose methods I have followed said: "We now possess some virus-vac-"cine from charbon, capable of protecting against "that fatal disease without being fatal in itself, a "living vaccine, cultivated at will, transportable "everywhere, without alteration, at length pre-"pared by a method that we may believe susceptible of generalization."

I shall now apply his words to yellow fever, and it remained for me to carry my experiments from the animal to man.

The experiment was made last week on myself. Some months ago I was inoculated with an extremely attenuated culture. Fifteen days ago by a second and stronger culture, and, finally, guided by special reasons, I allowed myself to be bitten by mosquitoes that had just bitten a man suffering from specific yellow fever. He was in the fifth day of the disease.

In view of my experiments it became easy to analyse what obtains in the human body, inoculated, as I was, with a virulence of maximum intensity, direct from the body of a patient.

Twenty-four hours after the above direct inoculation I felt sudden pains in the regions of the kidneys, a feeling of bruising or soreness in all my extremities, a sensation of tearing in my eyeballs. Two hours after these first sensations my temperature was taken in the mouth and was found to be 39° C. (36 9-10° centigrade being equal to 98½° Fahrenheit). That evening it was 40° C. The next morning also 40° C. That evening 39° C. and on the morning of the 3rd day 39°. Then it kept falling to normal.

Tongue creamy white, gums bleeding, the amount of urine was diminished by one-third. On the fourth day I had got back to my normal condition.

Thus, the preventive inoculation of yellow fever is proven. This was what I had been searching for, a virus capable of transmitting a mild type of the fever without danger.

The first step, the most difficult and the most laborious, because it was filled with the uncertainty of unknown factors, was over. The rest will surely follow in time.

A number of courageous friends having full confidence in the method, and who fully understood the importance of the experiments, and their great utility for mankind, have declared themselves ready to be vaccinated by me. I shall vaccinate them soon, with all the care that such a serious matter requires, and with all the precautions exacted by rigorous experiments.

In conclusion, I may add that the theoretical question of the preventive vaccination of yellow fever is thus solved. The practical question has now entered on a course of experimentation, and promises to be a fact and a safeguard to mankind.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, February 23rd, 1886.

By Francis W. Campbell, A.M., M.D., L.R.C.P.L.

(Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College).

HÆMOPTYSIS.

The patient now before us came to the out-door room on last Thursday complaining of having, during the previous night, spat up blood, and in proof of her assertion brought with her, in a small vessel, holding about an ounce, almost that quantity of expectoration which consisted principally of blood. Mr. Charles Vidal took her history which is as follows:—

"Catherine Murphy, aged 41, comes to hospital complaining of a hard dry cough, with spitting of blood at intervals. Pain under left breast and choking sensation before attack occurs, knows nothing about her grand-parents. Her father is alive and comparatively well, but last summer was in the hospital laid up with dropsy. Her mother died suddenly of heart disease. Her brothers and sisters are alive and well, with the exception of one sister who died of CONSUMPTION. Up to two years ago she was perfectly healthy, never being troubled with sickness of any kind, and being remarkably healthy as a child. After her marriage her health continued perfectly good; has had several children,

and was generally up the second day after confinement. About two years ago, while nursing her child, and being rather exposed to draughts, she caught a severe cold. She took a warm bath and hot drink and went to bed almost immediately. Next morning, when getting up,she fainted. Since then she has never regained her health. The cold was shortly succeeded by a dry, hard cough, which she was unable to get rid of. About three months after this first attack she coughed up about a tablespoonful of blood. The cough began in the ordinary manner, but instead of bringing up a harsh yellow expectoration she coughed up blood. After this up to the present time, at intervals varying from 3 to 4 months,she has these attacks occurring, and she will cough blood about 6 or 8 times during 24 hours. Between the attacks she is troubled with the cough. Before each attack she experiences a dull pain, succeeded by a sharp darting one under the left breast, and a feeling of general oppression over the chest.

THE PRESENT ATTACK occurred on Wednesday last. The blood coughed up is of a bright red color, intermingled with minute bubbles of air. During Wednesday night she brought away a large quantity, but was unable to secure it."

I placed her on a mixture containing Vinum Ipecac and Tinct. of Ergot, and whether due to the medicine or to nature,her cough is somewhat easier, and the expectoration of blood has ceased. The quantity which this patient has at any time passed has not been large,and the probability is that the present attack would have been slight even without any medicine having been given to stop the flow. There is, so far as the report shows, no history of heredity of consumption, although one sister, she admits, died of this disease. If we could get the history of the grand-parents and their relations it is more than probable that in some branch of the family a phthisical tendency would be discovered—for it is a well recognized fact that a hereditary tendency to many diseases passes over one, sometimes two generations—only to re-appear in the next. Upon examination of this woman's chest we will find decided dullness in the left infra-clavicular space with diminished or weakened vesicular murmur while posteriorly, immediately below the angle of the left scapula—and covering a small space there are distinct mucus rals. The other portions of the lung, indicate a feeble organ while the right is so far in a healthy condition. The history of the case shows that the exciting cause was a cold caught while exposed to a draught, and that this cold she has been unable to throw off. Her general condition seems fairly good, and there is one sign about her case. which is favorable, *i. e.*, that her general nutrition is excellent, and that there is no marked activity in the disease. From the small quantity of blood she has brought up on each occasion I infer that the spot of softening is limited, and that the vessels which have opened from the breaking down of tissue have also been small.

When called to a case of this kind you have to decide as to whether the blood comes from the stomach, post nares, the mouth or fauces. If it comes from the stomach, it will be ejected by vomiting and will be mixed with food. It will give an acid reaction, whereas pure blood is alkaline. It usually also has a blackish color from the action of the gastric juice. If it comes from the posterior nares, it is in the form of dark solid sputa, which are removed by hawking. An inspection will show you whether it comes from the mouth and fauces. It is coughed up, when it comes from the air passages, it is felt in the larynx and trachea, and is ejected with but little effort. In color it is bright red and contains bubbles of air, as did the blood brought up by this patient. The amount brought up varies from a teaspoonful to one or two pints, the average is a few ounces. It may last only a few minutes, when the amount coming up gradually ceases, but for several days the expectoration is tinged with blood. Death rarely takes place during an attack, but it does sometimes. A patient may only have one attack ; when this is the case, it is generally found that nature has taken this method of relieving a congestion of a portion of a lung. When it repeatedly occurs, at longer or shorter intervals, it is looked upon generally as indicating a serious condition of the lungs, though, I must say that an experience of over twenty years, has lead me not to take a too serious view of an hæmoptysis, unless there are other indications of a rapid softening of pulmonic tissue.

If hæmoptysis is large, suspect an aneurism unless the patient is in advanced phthisis ; an aneurism sometimes eats its way into the bronchial tubes, and is thus discharged ; an attack of hæmoptysis generally causes much alarm. The patient is nervous and agitated. Your first duty is to reassure the patient, 1st, that there is no immediate danger, and a possibility of a complete recovery.

Tell him that you have had more than one patient who has had repeated attacks, and who is still hale and hearty.

Treatment.—If patient is plethoric, may bleed, rarely required, but I would not hesitate to make use of the lancet, in a robust man with a full, strong, and bounding pulse.

If it is a large hæmoptysis and is persistent, cold to the chest. This is done with compresses, wet with iced water, or even with ether, which evaporates rapidly, *ice* itself recommended. Flint has used it with success, and no bad results. Revulsive measures as sinapisms, foot-baths and dry cupping to front and back of chest. Ligatures around the extremities to limit amount of blood returning to the heart. Common salt is the popular remedy, and is generally administered at once, before the arrival of a physician. It has but little value, nevertheless it continues to hold the mind of the public. It at all events makes the patient feel satisfied that something is being done for him. Quiet, rest in bed, voice restrained, room cool, head and shoulders raised, diet bland, drinks cool or cold. If the patient coughs, he should have an andyne cough mixture.

Plumbi acetate :—Galle Acid and opium, tannin, karameria are recommended.

Ergot in form of pill, 3 grs. every 4 hours ; ergotine injected hypodermically is a good remedy, also ice to suck.

Tinct. digitalis as a vascular sedative : alum and dilute sulph. acid are useful.

Turpentine, saline aperients useful in Plethoric cases.

MYALGIA.

A very large proportion of cases, in which pain is the principal symptom, are due to myalgia. This disease is a morbid condition of the voluntary muscles of which the chief and often the only symptom is pain on movement. It is sometimes called myodynia. It has no essential relation to rheumatism or the rheumatic diasthesis. To use the common expression "muscular rheumatism," is not correct. This error has caused much confusion of thought, and tends to maintain the obscurity which hangs over rheumatic affections in general.

As manifested in particular muscles or groups of muscles, myalgia is described as cephalodynia, torticollis (myalgia cervicalis) pleurodynia (myalgia pectoralis *vel* inter costalis) lumbago (myalgia lumbalis) dorsodynia, scapulo-dynia (myalgia dorsalis).

It is described in few text books. It is essentially pain produced in a muscle which is obliged to work, when its structure is imperfectly nourished or impaired by disease. Hence all influences which unfavorably affect the nutrition of the muscles, all diseases which directly affect the integrity of their structure predisposes to this affection. The defect in nutrition may be only relative to the amount of work the muscles is called upon to do, or there may be absolute mal-nutrition implicating the whole body. The muscles may be impaired by local disease which affects it alone, or it may share in morbid processes which also involve other and distant structures. Sedentary occupations leading as they do, to poor nutrition of the muscular system, from want of proper use and exercise.

Malnutrition from a diet deficient in amount, defective in kind, or in childhood from too rapid growth, the chronic wasting diseases, the state of convalescence from acute disease, and finally, degenerative diseases of the muscles themselves, all favor the development of myalgia. Among the acute maladies, which by their derangement of nutritive processes, especially render those who have suffered from them, liable to this painful affection of the muscles during convalescence, is acute articular rheumatism. It is this fact that has given rise to the view, that the muscles share with the serous and fibrous structures in the lesions of that disease and, therefore, that myalgia is rheumatism of the muscles.

Over and above these defects in nutrition, there is an especial predisposition or idiosyncrasy, the nature of which is unknown, which render certain persons, far more liable than others, to suffer from myalgic pains. This predisposition is met with in those who have inherited or acquired a gouty taint, and in those who are perfectly free from this taint. It is not associated with any special liability to true rheumatism. The most common exciting cause, is overwork, pure and simple ; especially overwork which brings into prolonged and excessive exercise, unaccustomed muscles. Next in frequency is exposure to cold, especially to damp cold, when over-heated or fatigued ; finally, inevitable and incessant contractions, such as are physiological and are performed without consciousness, or sensation in a healthy state of the muscles will, in muscles that are defectively nourished, or have undergone fatty, granular, or fibroid degeneration, cause more or less distinct myalgia.

As examples of myalgia, due to overwork, pure and simple, is the pain experienced in the adductors of the thigh, after a ride on horseback, when out of practice; the pain in the epigastric region, which is met with in children who have a persistent and troublesome cough. This is well seen in children who have measles; also the pain of spasm, particularly that which follows tonic spasm, such as occurs from reflex causes, as cramps in the calves of the legs at night, and in bathers. Many of the pains, which are met with during the growing period of our existence, and which are called "growing pains," are myalgic in their character. Examples of the disease, the result of exposure to cold, are seen in the pains of what is commonly called "*wry-neck*" or "lumbago." These are both met with in persons perfectly healthy, but, who being very tired, fall asleep in a current of cool air. This form of the disease is also often met with among "plumbers" who, during very hot weather, have to enter and work in cellars, whose atmosphere is chilly and damp. Here they often are compelled to assume strange and awkward positions, putting certain groups of muscles into excessive action for a time, thus materially assisting the local, or more properly, the atmospheric cause, in inducing myalgia.

Examples due to defective nutrition of muscles are very common in the flying or fixed muscular soreness met with in chronic wasting diseases, and in the convalescence from acute diseases, when muscular exertion is commenced too soon. Certain forms of præcordial pain, which are met with in degenerative lesions of the muscular substance of the heart, are evidently of a myalgic character. The symptom which is common to all cases is pain, it is sometimes constant, especially in acute cases. More often it is slight or absent when the patient is at rest, with the affected muscles in full extension. Calling the muscles into action, always aggravates it. The pain is felt all through the muscular mss, but is most intense at or near its tendinous insertion. In character it is stabbing or stitch like, sometimes dragging or tearing. At others it is a simple soreness, as if the part was bruised. In chronic cases, it is almost invariably accompanied by stiffening of the muscles, and this is occasionally met with also in acute cases. The difference in the character and severity of the pain is due to difference in the opportunity for physiological rest in different groups of muscles. The most obstinate and severe form of myalgia is that of the intercostal muscles, and their fibrous aponeurosis, generally known under the name of pleurodynia. Here the affected muscles are constantly concerned in the respiratory movements, and have but the briefest possible period for physiological rest, simply the brief internal, between the end of expiration and the commencement of inspection. Scarcely less stubborn and severe are the myalgias of the great muscles of which the principal function is to maintain the erect position of the head and trunk. Less painful and of short duration are the myalgias of the limbs; less painful because prolonged intervals of absolute rest may be voluntarily secured; of shorter duration because it is by rest, that the balance of nutrition is most speedily restored. Over the myalgic area some degree of tenderness usually exists. It is generally slight, except at the region of tendiness insertion where it often alone is felt. It is not associated with cutaneous hyperasthesia. As a rule, spasm does not exist in acute cases, except when the muscles are brought into use. In chronic cases, there is generally a condition of tonic spasm, a spastic rigidity. There is at times a loss of contractile power, and with it is associated some degree of atrophy. Objective signs are absent, except that the patient assumes by preference, an attitude of repose, and keeps, as much as possible, the structures which are involved, at rest. There is no pyrexia or fever; the appetite is good, and digestion seems not to be interfered with. There is not, as there is in rheumatism, acid perspiration. The urine is normal. There is no tendency to either pericardial or endocardial inflammation. There is little or no constitutional disturbance. If any is present it is slight, and is due to prolonged local suffering, and want of rest. Generally, with the exception of local pain, the patient remains in his usual health. Myalgia may affect the voluntary and occasionally the involuntary muscles of any part of the body. Those most generally attacked are those subject to continuous and excessive work. The aching dragging pain in the back of the neck, so frequent in poorly nourished nervous women, and in other cases of neurasthenia, the so-called pain of nervous exhaustion, is myalgic. It is felt principally during fatigue, and in the erect posture. Almost always it is relieved by lying down. It is referred, sometimes, to the base of the skull, sometimes to the back of the neck, but most often to the spinal region, just above the level of the upper border of the scapulæ. It is a very

harassing symptom. Many of the pains of that condition known as spinal irritation are myalgic. Acute myalgia is generally brief in duration—from a few hours to a few days. The chronic is indefinite in duration, from a few months to a life time. This variety has its periods of exacerbations and remissions, which are much influenced by change of temperature, and the different phases of the weather. The pathology is obscure. It is not rheumatic, although at times the two conditions do exist together. Such relationship is accidental, not casual. It does not resemble neuralgia. It is believed to be of the nature of a sub-inflammatory process within the muscle substance. The not uncommon instance in which an injury or contusion has been followed, shortly after recovery, by severe myalgia, would go to prove this theory.

The indications for treatment are three: (1) relieve pain. (2) Physiological rest for the affected muscle. (3) Restoration of the balance between the nutrition of the muscle and the work which it has to perform. 1. Relief of pain. This may often be secured by rest in a position that permits the complete relaxation of the muscles involved. In acute cases, due to overwork, little more than complete rest is required, a few hours sometimes, or at most a few days, and muscular contractions are once more painless; when this complete muscular relaxation is impossible, or fails to give relief, anodynes are required. Morphia injected under the skin by means of the hypodermic syringe, at first ¼ of a grain, combined with the $\frac{1}{100}$ of a grain of Sulphate of Atropia. If relief does not follow the first injection in 6 hours, a ¼ of a grain of Morphia with the same quantity of Atropia as was given at first, viz., $\frac{1}{100}$ of a grain. The continuous application of dry or moist heat by means of hot water bags, flannels, poultices, and spongio-piline is also useful. Anodyne liniments also do good. Soap liniment, containing aconite. Tr. opii, belladonna, chloroform or chloral, are useful. The compound belladonna liniment of the B.P. sometimes gives excellent results. Emplastrums or plasters of Belladonna, Opium, Conium and Menthol are recommended. Galvanism sometimes gives prompt relief. The pain gives way often under gentle and long continued massage.

(2) *Rest* is enforced on the patient by the intensity of the pain which movement causes so that in severe cases rest in bed becomes a necessity. When the respiratory muscles are affected, it is advisable to make an attempt to limit their movements. This is done by means of overlapping strips of adhesive plaster drawn from the spine downward and forward in the direction of the ribs to the medium line in front. Such a dressing gives much comfort. It is advisable at times also to support these muscles by a bandage tightly wound around the chest.

(3) The balance of nutrition is restored by rest. Local means to further this end, are such as relieve pain viz., heat, anodyne and stimulating liniments, massage and galvanism. The parts must be protected from sudden changes in temperature by extra flannel, sheets of wool, or cotton batting, covered, if necessary, with a piece of oiled silk or gutta percha tissue. In such cases prolonged massage, with passive movements, and the slowly interrupted galvanic current, alternating with rapid faradic currents, now and again show good results. Ten grains of Dovers powder or pulv. ipecac co. at bedtime and a mild purge, saline the best—in the morning. In gouty or plethoric persons, purgation is called for, and the Turkish Bath is also useful in the same class of persons, in Anemic subjects, Quinine, Iron, Lime, and C.L.O., are useful.

If the attack linger, full doses of Chloride of Ammonium, and in old cases, iodide of potash in moderate doses, should be given well diluted and continued for a lengthened period. In stubborn cases Anstie recommended deep accupuncture of the muscle near its tendinous attachment. When the general nutrition is poor the local trouble is apt to be obstinate and often only yields to measures which restore the general health.

CANADA MEDICAL ASSOCIATION.—PRESIDENT'S ADDRESS.

The President's Address, delivered before the Canadian Medical Association, at its nineteenth annual meeting, held in the city of Quebec, on the 18th August, 1886, *by T. K. Holmes, M.D., Chatham, Ont.*

Gentlemen of the Canadian Medical Association.—When, a year ago, you paid me the high honor of electing me to the presidency of this Association, I will not pretend to deny that the distinction that appointment conferred afforded me the most lively gratification, which, however, was qualified by several considerations that were to me of quite a serious character. Not the least of these was the knowledge that I must address an audience distinguished for intelligence and for scholarly attainments, both professional and general, and

that the learning and ability of my predecessors in office would not detract from the difficulty of the task. Indeed I felt, and still feel, that my chief qualification for the position in which your kindness has placed me is an unswerving interest in the prosperity of this Association, which has influenced so strongly and so favorably the medical profession of this country. While expressing my most sincere thanks for the highest honor at your disposal, I feel sure that the same kindly feeling which prompted its bestowal will render easy the duties of presiding officer, and that the same zeal which has hitherto marked the scientific work of this Association will characterize the meeting now convened.

Romance and history combine to render the city of Quebec the most interesting spot in Canada, and our Association may well be congratulated on the privilege it enjoys this year in holding its session in a place rendered famous by so many circumstances. The adventurous quest and the indomitable will of the early navigators, who laid the foundation of civilization in the country when they planted the colors of France along the shores of the St. Lawrence, may well serve us as models for emulation in our more peaceful search after that scientific knowledge which contributes so much to the happiness of mankind. If our efforts be at all comparable to theirs, equal honors and equal blessings may be expected to result from our endeavors. In this connection I may expres, the wish that the same spirit of enlightenment and progress that characterizes our parent countries, France and England, may animate their descendants in this young Dominion, and that the Canadian profession of medicine may not be unworthy the great names of Harvey and Lawrence, of Hunter and Pasteur. It will certainly contribute greatly to the progress of medical science in this country if the two races whose ancestors have led the van in Europe go hand in hand and vie with each other in creating a professional status here inferior to that of no other country. Some of the means by which we may hope to accomplish this will be the subject of my remarks to-day.

The architect who aims at lasting fame not only lays broad and deep the foundations of his work, but anticipates each step in the growing structure, even to the crowning event of its completion. He selects the material, superintends each process of manufacture, shapes every part, and embellishes the whole, until it rises in symmetry and perfection, and stands the glorious and enduring monument of his creative genius. In this land there is arising a temple whose foundation is based upon the accumulated labors of some of the greatest architects of human happiness. Their names shine with brilliancy unabated all down through the vista of past years, and animate and enlighten all who labor in the same profession and emulate their achievements. We are the privileged architects of this temple of medicine in our country and generation, and I trust that the marks of our skill may not be indistinguishable in the rising edifice. The progress of scientific medicine in the recent past is the result very largely of the development of the science of biology which has done so much to establish medicine on a scientific basis.

Until the study of life in its elementary forms was rendered possible by modern instruments of precision, empiricism necessarily entered largely into all medical progress, and it was maintained as an opprobrium that medicine was no more than an enlightened empiricism. This is true but it could not have been otherwise, since until the birth of biology as a science, medical knowledge had either to remain at a standstill or to progress by a series of empirical jumps which sometimes left it in a more advanced state of usefulness, and sometimes failed to do so even in the slightest degree. Although empiricism in medicine has been such a laborious means of advancement, we must admit that it generally contained some grains of truth, and that when it failed to accomplish what was expected of it, the reason of the failure lay, not in the worthlessness of the efforts at progress, but in the difficulty of separating the grains of truth from the abundant chaff in which it was contained. Each new fashion, while it has contained some truth, has failed and given place to another little in advance, not because it contained no truth but because the truth it did contain was incomplete. When, however, the study of biology was established on a scientific basis, medicine, which is but an applied science of biological doctrine, became less empirical and more scientific, and by the aid of physiology and pathology, which are the necessary sequence of biological investigation, has advanced to the present high and satisfactory position it occupies. The very fact that morbid processes are viewed and studied from a physiological standpoint and are estimated and measured by the laws that govern elementary processes of life renders it certain that the progress of the

recent past and of the present is on surer lines and firmer foundation than ever before, and that the future of medicine will be the glorious sequel of the present, as the present is the glorious sequel of the past. It justifies the belief that the advantages to the human race likely to accrue from the prosecution of medical studies and investigation pursued on these lines will be far greater in the future than in the past, that physiology and pathology, which are but in their infancy, are destined to illuminate the dark places in medicine and reveal the true cause of much human suffering and premature death.

We are accustomed to regard with wonder the achievements of modern invention in the art of war, and to contemplate with amazement the perfected instruments of destruction that strengthen the hands of modern belligerents, but the general who advances to battle with all these at his command has no greater advantage over a barbarous foe than modern medical searchers after truth in the realms of disease have over their empirical brothers of the prebiological period. Possessing these advantages, and stimulated by this prospect, it is reasonable to suppose there will, in the near future, arise men whose investigations, beginning where those of Sanderson, Koch, Virchow and Pasteur leave off, will be equally brilliant and equally conducive to human happiness and longevity. The country that produces these men will be the country that affords the best medical education to those entering the profession, and that most facilitates original investigations for those who have chosen that field of labor. No physician in this country, worthy of the profession to which he belongs, can be indifferent to the position Canada shall occupy in the honorable and honored competition in which so many are and will be engaged.

The future of the medical profession in this as in any other country will largely depend upon the natural ability and the mental and moral training in childhood and youth of those entering its ranks; so that in considering any scheme for the creation of a high standard of medical qualification, domestic training, and the plan of education pursued in public schools must be recognized as bearing an important part.

It has been said that poets are born and not made; a saying that is not untrue when applied to medical men, for a combination of mental and moral qualities which cannot be wholly acquired, enters into the character of every great physician. It is cause for regret that greater discrimination is not exercised in directing young men in the choice of a business or profession, and that convenience and not natural aptitude should frequently determine a young man's course in life. There are so many examples of men rising from obscurity to great eminence in every vocation that there has arisen a popular impression that all obstacles and natural defects can be compensated for or can be overcome by diligence and perseverance on the part of any aspiring youth. It would be wrong to under-estimate the value of industry and high aspiration, but these, while they can improve all and can render mediocrity respectable, can never supply the place of genius. While it is impossible to create genius by any system of training, it is almost impossible to repress it altogether by any carelessness or neglect.

"That many mute inglorious Miltons lie buried in our church-yards, I venture to doubt: the fire of a Burns is not easily hidden under a bushel, but some smaller lights may be quenched, and the best of such men, like Burns himself, may be thwarted and broken in heart." (*Dr. Allbutt.*)

Other things being equal, the child, who from infancy is trained to think and to reason correctly and to express its thoughts clearly, will be more likely to attain eminence in mature life in all pursuits of an intellectual character than the child not so trained; indeed, skillful training in early life is essential to success in persons of average natural capacity, and is of unquestionable importance to all.

The efforts to establish, not to maintain an efficient system of education in this country are worthy the highest commendation, but the task is a difficult one and there is danger of enthusiastic legislators over-stepping the work and making our sons and daughters mere receptacles of knowledge instead of creators of knowledge by failing to recognize that it is vastly more important that a man should think and reason correctly than that he be the professor of multitudes of facts and definitions. Physicians, with such questionable elementary training, are like the artificer well supplied with the tools of his craft, but lacking the skill to use them. It is not to such that we may look hopefully for real progress in our science; they make up the great army of routine practitioners who trouble themselves little with profundities, and are like Dr. Sangrado, who felt quite sure that those of his pa-

tients who, under the care of his pupil Gil Blas, died from excessive bleeding and the copius drinking of warm water, did so because his panacea was not applied with sufficient vigor and determination.

It is probably not incorrect to say that most medical men in Canada are of opinion that the chief defect in our school system lies in the oversight here referred to. The curriculum for medical matriculants in Canada must create a higher average intellectually among young men aspiring to the profession, but there can be no doubt that a widening of the curriculum, so as to embrace a more extensive knowledge of the natural sciences, would greatly facilitate the acquisition of knowledge presented to, and required of, medical students. An acquaintance with the laws relating to climatology would serve a useful end in the study of epidemic and endemic diseases, and in an estimate of the influence of climate on disease in general; an acquaintance with minute organism and histological structures, such as could be readily acquired in any high school provided with a microscope would prepare the mental soil for the reception and quick germination of the seeds of knowledge, sown by teachers of physiology and kindred subjects in medical schools. The medical student, who learns something of biology, of cells and germs, and of bacterial life only after he has entered upon his course of medical lectures, is at a great disadvantage, and loses much time in a bewildering effort to master names and technicalities, and I can conceive of no more irksome task for a teacher that to lecture to a class of young men laboring under this disadvantage.

The relations existing between medical schools and licensing bodies in this country are so satisfactory that little desire has been manifested to alter them, and it is beyond doubt that to these relations we owe, in great measure, the improved status of medical education here.

When the great discovery of Columbus opened to the old world the unknown and virgin resources of the new, the most progressive nations entered eagerly into keen competition for the advantages this discovery presented. National ambition and individual courage and endurance combined towards the great aim and object of colonization and development of natural resources in this continent. The results are patent to all; a newer and greater freedom and civilizations in the new world are the rich fruits of these vigorous pioneer efforts, and the evidence exists in the glad and prosperous millions of the western world. Analogous to this is the meteoric brilliancy of the discoveries in medical science within the past fifty years. Physiology, pathology, the etiology of disease, physiological medicine, preventive medicine, these are some of the fields laid open to the modern physician, and they leave no lack of opportunity for the exercise of ambition, skill, and philanthropy. Nearly all European nations and the individual States of the neighbouring Republic have shown their determination to participate in the honorable achievements in medicine, thus rendered possible in the near future. Schools for the pursuit of original investigation have been liberally endowed by these governments, and this liberality has been supplemented by the wise and princely donations of private individuals.

Sanderson and Klein, Koch and Pasteur, our own Osler, and many others scarcely less distinguished, are devoting their lives with indefatigable zeal to the elucidation of scientific questions upon which rests the superstructure of medical practice, and they are enable to do so only through the liberality of the various governments under which they live. Research of this kind can only be carried on successfully by men naturally adapted to such work, and who are free from the care and anxiety inseparable from the lives of those engaged in the active practice of their profession. Hence the absolute necessity for the endowment of institutions of this character. The large expenditure necessary to the equipment of a laboratory for such work has greatly retarded it in Canada, and until means are provided we must be content to occupy an insignificant place in the great race now being run. Can it be that this country or its wealthy citizens will remain indifferent in this matter, while our nearest neighbor is lavishing millions of dollars to attain honorable eminence in the progress of medical science? Scarcely a State in the Union that has not its well endowed university, and the princely gifts of Cornell, of John Hopkins, of Mr. Stanford, of Mr. Vanderbilt and of Sir Donald A. Smith are the great beginning of greater things. Who can estimate the blessings to the human race that must arise from the wise munificence of these noble men! Millions yet unborn shall speak their names with feelings of reverence and love, nor will other monuments be needed to make their names immortal. In this connection, I would suggest that a committee of this Association be appointed to report at the next annual meeting upon the best means

of establishing one or more laboratories, where original investigation in medical studies may be carried on.

Medical societies constitute a most important factor in the advancement of medical knowledge, and it is much to be regretted that they are not everywhere established. It is safe to say that the maintenance of active local societies contributes immensely to the knowledge of their members by encouraging careful observations in private practice and more extensive reading and research. Aside from a scientific point of view, the harmony engendered by these meetings eliminates much of the jealousy and misunderstanding that are so humiliating and so subversive of individual happiness and public respect. The general organization of small local societies would be a sure means of improving the representations at the larger ones, and would secure to them papers and discussions of a higher character. Provision has been made in Ontario by the Medical Act for the formation of territorial associations in different electoral divisions, and in some of them most prosperous societies have existed for many years, and the reports of their proceedings constitute valuable additions to medical literature.

Of all the means of medical progress, few could be more advantageously utilized than the accumulated experience of men in private practice if they could be induced generally to keep a systematic record of their more important cases. Time, skill, and the privilege of post-mortem examinations are essential to the successful recording of cases, and their absence is doubtless the chief cause of neglect so universal in this matter. Time so consumed would be more than repaid by the increased skill acquired; the high standard of qualification now required of graduates should remove the second difficulty, and if requests for autopsies were made in all cases necessary to verify a diagnosis or to elucidate an obscurity, the prejudice now existing against them in the public mind would to a great degree disappear. Let rural practitioners who underrate their opportunities of contributing to the general fund of medical knowledge remember that Jenner, McDowell and Koch were not metropolitan physicians, and were unknown to fame until their great discoveries, wrought out by diligent study and observation, placed them among the great benefactors of mankind. Observation and reflection are the parents of discovery, and never fail to produce their offspring, although the gestation may be long and the labor hard. Every truth so revealed is like a lantern, the light of which may be turned on the dark places of our field of investigation and new truths stand clear to our mental vision, and we talk boldly and safely on, using each new thought to illumine the obscurity that surrounds and precedes us.

The building up of a science is a slow and laborious process, and facts must be supplied by a multitude of workers. The scholar who deciphers the cuneifor inscriptions of ancient Babylon or the hieroglyphics of Egypt, and contributes to our knowledge of these nations, must be aided and preceded in his work by the archeologist who discovers and the laborer who unearths these imperishable records of past events. So in the building up of medical science, the humblest worker is not to be despised, for his contributions may be and often are essential: but to be available, his thoughts and observations must be recorded, that they may be weighed and winnowed by those suited to the task.

All who have read the lectures of Murchison on "Functional Diseases of the Liver," of Roberts on "The Digestive Ferments," or of our own Osler on "Malignant Endocarditis," must be impressed by the great impetus given to practical medicine by these, and will need no arguments to convince them of the desirability of the endowment of similar lectureships here. From a literary and scientific standpoint, the advantage accruing to the profession from such lectures would be important, but of even more importance would be the encouragement afforded to the more gifted and aspiring of our own Canadian physicians and surgeons. As Canadians we may feel proud of our country and of its physical and political excellencies, but we may rest assured that, so far as we, medical men, are concerned, others will estimate us by the reasonable and practical standard of our contributions to medical knowledge and by our scientific attainments. No conservative clinging to absolute methods on the one hand, or the multiplication of weak meretricious literature on the other, can impose upon the learned in the professional world, and the sooner we create strong incentives to scientific work the sooner will the workers be forthcoming. I would here offer the suggestion that this Association take into consideration the establishment of lectureships similar to those in England and other older countries.

Of all means enumerated for the advancement

of medical science, individual effort undoubtedly ranks first. Associations can teach and stimulate, but they can never supply the place of study and observation. Truth only yields her wealth to him who lays siege to her shrine. Emmerson says the hardest task in the world is to think. We try to look in the face an abstract truth, and we cannot do it. The mind swerves from the encounter, and thick darkness prevails. We return to the charge and try to force Truth from her citadel, and then in a moment, when we least expect it, a rift in the cloud comes, a ray penetrates our minds, light floods in more and more, until objects, dim at first from sudden light in dark places, become real shapes, and we guage their dimensions and estimate their proportions with unerring exactitude. Few truths are discovered but by this laborious process, and because we evolve them slowly and often only partially by delving beneath the surface of things, it is better to labor so than not to work at all, for when the surface is broken and disturbed others will see clearly what we only half perceive, others will perfect what we are able only to dimly outline.

It requires no prophetic eye to perceive the future greatness of Canada. Her vast extent and varied and inexhaustible natural resources everywhere abounding are such that it would seem impossible for any series of unfortunate events to stem her progress, or to divert her course in the contest of nations for pre-eminence in all that constitutes true greatness. The spirit of progress is abroad, armed with the all-compelling weapons of modern invention, hampered by no medieval absurdities, and thwarted by no ignorant prejudices; we are justified in entertaining the most exalted and hopeful view of the future of our country, and may deem ourselves fortunate in bearing a part in the development of so fair a heritage. As physicians, the part we assume is not an insignificant one. To enact wise laws, to encourage commerce, to preserve peace within our borders, and to command the respect of neighboring nations, are objects worthy the most exalted ambition and the most patriotic determination; but will it be said that the aims of medical science are less exalted or less conducive to national prosperity or individual happiness? To cure disease, to alleviate suffering, to extend the limit of human life, to enlarge the field of human usefulness, to be able to prevent disease by removing the cause; surely the profession that devotes its energies to the accomplishment of these objects is entitled to the fostering care of governments and to the liberty of wealthy citizens.

"A sound nation is a nation that is composed of sound human beings, healthy in body, strong of limb, true in word and deed, brave, temperate, sober, chaste, to whom morals are of more importance than wealth. It is to form characters of this kind that human beings are sent into the world, and those nations who succeed in doing it are those who have made their mark in history. They are nature's real freemen, and give to man's existence on this planet its real interest and value!" (*Froude.*) In the not-distant future this Dominion will be the home of fifty millions of people with all the wealth and all the greatness that implies a thought that might well inspire us with feelings of pride and satisfaction; but the wise man will not be so much impressed by the vastness of our territory, the multitude of our people or the size and wealth of our cities; but will be more concerned in the problem of the social advancement, the civil liberty, the physical perfection, the scientific status, and the moral rectitude of our teeming population. When that time comes may the science of medicine have contributed its share towards the creation of a people unsurpassed for physical perfection and mental sprightfulness, and for all those virtues that are born of these. Should these hopes be realized, then indeed would happiness prevail and prosperity sit as a ruling genius on the brow of every hill, the bosom of every lake and the bank of every stream; and the application to our country of the language of one of England's greatest poets would scarcely be considered hyperbolical, when he says:

> "All crimes shall cease and ancient fraud shall fail
> Returning justice lift aloft her scale,
> Peace, o'er the world her olive wand extend
> And white-robed innocence from heaven descend."

Dr. S. A. Defoe, of Washington, N. J., writes to the *Med. Record* that he has found the following to give excellent results in melancholia. R. Valerianates of zinc, quinine, and iron, each twenty grains, to be divided into twenty pills. One pill is to be taken three times a day before meals. The drugs should be absolutely pure. Dr. Defoe says he has tried this remedy thoroughly, and finds it a specific for the worry of nervous women and for incipient melancholia.

Society Proceedings.

MEDICO-CHIRURGICAL SOCIETY OF MONTREAL.

Stated Meeting, May 14th, 1886.

J. C. CAMERON, M.D., 1ST VICE-PRESIDENT, IN THE CHAIR.

Dr. A. L. SMITH, for the author, read a paper, entitled,

Notes on Phthiriasis.

By P. W. P. MATHEWS, L.L.D., M.R.C.S.E., etc., Dominion Coroner for the North-West Territories and Medical Officer of the Hudson Bay Company, etc.,

as follows:

A case of somewhat unusual occurrence came under my notice here some short while since—one of phthiriasis. It is the second only that I have personally known, and I trust that it will be of sufficient interest to justify me in offering you a few notes, both in connection with the case itself and the disease.

George "Beardy," an Indian, aged 30, was admitted to the York Hospital suffering from capillary bronchitis. In ordinary cases, and in cases other than the one I am about to describe, it would be, or ought to be, unnecessary to touch upon cleanliness, both as regards the patient and his surroundings, even in an Indian cottage hospital; but the nature of the case requires my emphasizing the fact that every rational and judicious precaution was taken to ensure cleanliness, both in the washing of the patient and in the changing of the body and bed clothes. The condition of the patient varied for several days, and on the evening of the tenth, symptoms of pulmonary congestion set in. I was in attendance for the greater part of the night, and on again visiting him at about 10 o'clock in the morning, found him in a comatose condition. Giving a few directions, and re-covering his chest, which he kept constantly exposed, I left and in two hours' time was hastily called by the nurse, who stated that "he was being eaten up." Upon arriving, to my astonishment, and, I must say, to my interest, I found the man one literal mass of lice, creeping over the bed-clothes, crawling on the body—one slow-moving, disgusting mass, but a living, suggestive "precursor of the grave." He was as carefully cleansed as he could be under the circumstances, and shifted to another bedstead, with clean bedding, etc., but all to no purpose, for within two hours the body was again simply infested by vermin, and so it was to the end, some six hours afterwards. Upon examination of the skin, I found a multitude of irritable-looking spots on many parts of the body, from which the nits could be detached by lateral pressure. The louse itself was the common body or clothes louse (*pediculi vestimenti*). In this connection I must note a few cases which I have collected from various works.

Dr. Whitehead relates a case which I shall here abbreviate; R. S., aged 43, a farmer, strong, of sanguine complexion, contracted a virulent form of syphilis in April, 1840, for which he was chiefly treated with induretted sarsaparilla. Seven months afterwards he suffered severely from secondary symptoms, when he was placed on a course of mercurial medicine, and became salivated, with great relief to the disease. At the end of 1841 he again sought advice, stating that for several weeks past he had been annoyed by the presence of lice about his person, chiefly on the trunk. He was scrupulously clean in his habits, and had never before been troubled in a similar way. No lice were found about the head. What little hair he had was clean, fine, and silky. The vermin so increased in number, and produced such mental distress, that fears began to be entertained for the integrity of his intellect. Upon an examination of the skin, the nits were there found to be imbedded, and at this period the generation of the insects got so considerable that the flannel vest put on clean in the morning was crowded with them by the end of twenty-four hours. For some time remedies were unavailing: sulphur, oxymuriate of mercury, white precipitate, and hellebore were freely tried, with little or only temporary benefit. At length, by mere chance, a mixture of iodide of potassium and prussic acid in full doses was given; and in a few days, after taking sixteen or eighteen draughts, the cure was permanently completed.

There is another case in which the quick generation of the body louse was remarkable. The patient was a young lady, a member of a most respectable family, in whose skin, mostly below the margin of the mammæ, the nit was found in a small pimple which gave exit to its contents like a pustule in acne. She had been troubled with these lice for several years. Mr. Bryant, of London, England, has reported a somewhat similar case: A patient who had been a governess, and who was 30 years

of age, was admitted into Guy's Hospital. The whole of her body was literally covered with lice; the irritation and scratching having given rise to excoriations and scabs. She was put into a warm bath, and all her clothes were taken away. Every precaution was adopted to remove all the insects, but two hours afterwards her body was again covered with them, although she lay in a clean bed. She was again thoroughly washed, but the vermin reappeared immediately. All the remedies employed proved useless. Bernard Valentin has also related the history of a man who suffered from intolerable itching on all parts of his body, while his skin was covered with tubercles. On incising these, each was found filled with lice. Bremser once met with a mass of lice in a tumor on the head. And Jules Choquet observed some thousands of these insects in a subcutaneous cavity. According to Erasmus Wilson, the explanation of these cases is simple; for he says that the pediculi creep from the outside of the skin into follicular tumors, when they feed on the contents, and are afterwards found as the sole occupants of these sacs.

As is well known, lice, under certain circumstances, become developed on the surface of the body, a fitting soil being supplied by filth and by the morbid secretions in skin affections, as well as by constitutional disease. But I wish the more particularly to refer to what appears to be an idiosyncrasy, or rather a condition of constitution, that in some cases appears to favor the development of pediculi, as is evidenced by the case under my own care, and those I have advanced as further illustrations, so that the statements of some old authors that divers persons "have come to their ends, being devoured by lice," are not so very improbable after all. But what appears so remarkable in this case of the Indian Beardy is what I may with some reason term the apparently spontaneous generation of the pediculi, their existence not having been noticed at an earlier stage. The man was carefully and watchfully tended from first to last, and, further, he insisted upon his chest being constantly exposed. At ten o'clock in the morning it was perfectly free from "bite" or "hæmorrhagic speck"; at twelve it was one mass of eruption. Difficulties only become intensified upon a further examination of the case, for, in the first place, their period of incubation is six days, and, secondly, judging by their organization, it is perfectly clear that these pediculi are air-breathing animals: and that, consequently, they cannot exist as adult insects under the skin, where respiration would seem to be impossible.

Among the poorer classes in England (I do not know if the same holds good in Canada), any unwonted appearance of lice in connection with a sick person is invariably regarded as a precursor of death. Is it possible that the approaching dissolution is indicated or appreciable to the insect,-by the lowering of the surface-temperature, etc., and its quittance of the body to the bed-clothes attributable to this instinct?

Remarks by DR. SMITH.—Such cases as this are rare in this part of the country, because it is difficult to find any one so dirty as to give the body-lice a chance to breed in such quantities. Cases of pediculus capitis and pediculus pubis are quite frequent at the dispensary, but he has seen only a few cases of pediculus corporis, principally in neglected old men. Among the Indians of Lake Huron and Georgian Bay, and also among the shanty-men in the Upper Ottawa, the pediculi corporis were frequent guests, and by the way they were tolerated one might think that they were not altogether unwelcome; and as these persons often wear the same flannel shirt for six months or a year without washing it, it was easy to see that they would multiply continuously, as the eggs hatch in six to eight days, and one female may see the birth of five thousand descendants. The disease is easily cured by means of an ointment containing one part of the oil of delphinum staphisagria and seven parts of lard. I have also found the Ung. Hydrarg. Ammon. very effective.

Dr. J. C. CAMERON said that coal oil was a good application for body lice, and if Balsam Peru be added to it, the odor was hardly objectionable. Chloroform he has found useful for crab lice.

General Tuberculosis following a Nephritis.—Dr. WYATT JOHNSTON exhibited the kidney, bladder and other organs, and Dr. J. C. CAMERON related the case:

Patient, aged 26, had remote history of phthisis in one of his cousins. He had knocked around the world a good deal, exposing himself at times to great hardships, and drinking pretty freely. He always enjoyed good health till November, 1884, when he had an attack of scarlet fever, followed by sharp nephritis. He came under Dr. Cameron's observation in Feb., 1885. Ten per cent. of albumen was then found in his

urine, also some red blood-corpuscles and casts, chiefly hyaline. Under treatment his symptoms improved; the casts disappeared in about two months, but more or less blood and albumen remained all summer and autumn. The presence of urethral trouble was suspected, as an old gonorrhœa and gleet had persisted for a long time. No examination was made till Jan., 1886, when Dr. Roddick passed a No. 3 steel sound with some difficulty through a long, deep-seated stricture; a sharp attack of cystitis followed, which did not yield to internal treatment. When the acute symptoms had somewhat subsided, he was etherized, and an attempt made to pass a catheter and wash out the bladder, but nothing could be got past the stricture. His condition was becoming so serious that perineal section was decided on A careful examination of the lungs revealed nothing abnormal. The operation was performed on 17th February., and his immediate sufferings thereby relieved, but his symptoms did not markedly improve. High, irregular temperature, rapid pulse profuse perspirations and gradual emaciation were the chief symptoms. About March 1st he spat up blood, and, on examination, dullness was discovered at both apices; softening soon began, and went on rapidly, till, in six weeks, his lungs were completely riddled. His wound never healed. He died 23rd April. The diagnosis lay between a general tubercular condition underlying the renal and vesical catarrh, probably fanned into flame by scarlatina, and pyæmia, due to retention of putrid matters in the bladder by a tight stricture. The rapidity of the lung break-up was particularly noticeable, repeated examinations failing to detect anything abnormal in lungs till about six weeks before death. The right kidney was made up of sacs of pus, the walls being infiltrated with tubercles. The ureter was dilated, and its walls thickened. The bladder showed evidences of the cystitis and its walls near the exit of the ureter were also thickened with tubercular infiltration. The other abdominal organs were full of tubercles, with the exception of the left kidney, which was normal. Dr. Johnson found bacilli in the lungs, kidney, ureter and bladder.

Dr. Campbell said that though tubercular disease usually begins in the lungs, still it frequently attacks other organs first. In this case, most likely, it commenced in the bladder or kidney. Although it is said that no nurse ever contracted disease in the Brompton Consumption Hospital yet he had several times seen the disease attack a husband who had a consumptive wife, and *vice versâ*. He advised separation where one had the disease. He believed strongly in the heredity of consumption.

Death following abortion.—Dr. Rowell exhabited the uterus and Dr. Armstrong related the case. He said the cause of the abortion was uncertain; the patient, aged 23, had had several before. On his arrival he found the fœtus, aged about six months, had come away, and he had no difficulty in getting away the placenta. Two days after, the woman became delirious, and had a very rapid pulse and fever. She continued suffering from apparent septicæmic poisoning till May 13th, when she died, having aborted April 5th. He was at a loss to account for the cause. The discharges were at no time offensive; she never had a chill, and never complained of abdominal pain. He washed the uterus out, using a return tube. Toward the end, vomiting set in. Dr. Rowell said that on opening the abdominal cavity he found the intestines matted together and covered with lymph and pus; the pelvis was filled with offensive purulent matter, and in the left iliac fossa was a collection of similar-looking pus, enclosed in inflammatory adhesions. The mucous membrane of the uterus was thickened and covered with a thickish bloody discharge. On the right side of the body of the uterus was a small fibroid.

Dr. Trenholme said that most likely she had had old pelvic adhesions, with pent-up inflammatory matters, and that the fresh trouble (abortion) again lighted up the mischief. It being painless may have been due to tolerance from repeated abdominal trouble.

Dr. Kennedy thought this case in many respects similar to one he attended some years ago. The woman had had five attacks of peritonitis. Deep pressure over the abdomen gave little or no distress. He diagnosed the case to be tubercular peritonitis. She died suddenly, and a post-mortem examination revealed a large pelvic abscess which had burst, the attacks previous no doubt being due to slight ruptures of the abscess. Ovariotomists found they had better results follow operation where peritoneal adhesions existed, producing a tolerance to interference.

Dr. Shepherd thought if the case could have been diagnosed, the proper thing would have been to open the abdomen and wash out the peritoneal cavity. Recovery had followed operations for

inflammation produced by perforation of the appendix vermiformis.

Dr. WILKINS said he had seen an absence of evidence of pain in some typhoid fever cases produced by the dulling effect of the typhoid poison. In one fatal case of perforation there was no evidence of pain shown.

Stated Meeting, May 28, 1886.

T. G. RODDICK, M.D., PRESIDENT, IN THE CHAIR.

Case of Hysterical Paralysis in a Boy.—Dr. LAPTHORN SMITH exhibited this case, and gave the following history :—

Joseph L., aged 11 years, was always a delicate child; never had scarlet fever nor measles. He has often had running at ears (otorrhœa), but never had any disease of his eyes until this year. Family history good; father and mother very healthy, as also his grandparents. Has six brothers and sisters living, and none dead. There is no evidence of syphilis or tubercle in any of the family. Last June his mother first noticed that he dragged his left leg in walking, and, though he was able to go about the house, he could not go out. He had no photophobia at this time. He dragged his leg for about a week, and then recovered without any treatment, returning to school, where he continued to attend until the vacation on the 1st August. From June to August, however, he complained of pain in the left knee, sometimes during the day and sometimes at night; but he did not drag his leg again until January of this year, when one day he became slightly deaf, and both external ears became exceedingly painful to the touch. Next day his eyes were red and swollen, especially the lids, and about two weeks later his legs became so weak that he was unable to stand. He could bend them easily, but could not keep them straight. One evening in March his left eye suddenly closed, and neither he nor any one else was able to open it again until a few days ago. Almost from the beginning of this attack, his legs, from the middle of the thighs to the toes, have been exquisitely painful to the touch, as also have been his external ears. This hyperæsthesia was real, for his mother several times, while he was asleep, touched him lightly on these over-sensitive parts, with the result that he suddenly awakened with a frightened scream. His father also tested his paralysis by setting fire to his clothes, but he was unable to get up. I tried several times to touch him gently on the affected parts, with his eyes blindfolded, but always with the effect of making him cry, although he would allow me to pinch him moderately in any other part of the body, even within half an inch of the sensitive parts. Neither was I able to expose his pupil. He had such a dread of the light reaching the retina of his left eye, that even when I forced the lids apart he rolled the cornea up out of sight. I examined his spine carefully, and there is no tender spot, and the patellar reflex is quite normal. I thought his case one of functional nervous disorder, and as he was pale and weakly, I placed him on a ferruginous treatment with syrup of iodide of iron. He had only taken this remedy for less than a week when his father returned from the country with some ferns and Dr. John's herb, which a friend recommended him to use on the boy's legs. He boiled them together, and rubbed the boy's legs with the decoction during ten minutes, in spite of his cries, and afterwards made poultices of the leaves and bandaged them on to his legs. The next morning the boy walked with a little difficulty, but without assistance, into the kitchen. That morning the pain left his legs, but instead he complained of a feeling of pins and needles in his feet, and also in his left eye, which he was able to open three days later. He is now quite well.

Dr. Smith had met with somewhat similar cases in young females, but this was the first he had seen in a boy, and he thought it of sufficient interest to bring before the Society.

Dr. HENRY HOWARD said the temporary paralysis, whether it occurred in males or females, was always hysterical, and recovered without treatment, and that, unfortunately, the recovery was generally attributed to supernatural miracles.

Gunshot Wounds of the Chest.—Dr. JAS. BELL then read a paper on this subject.

CASE I.—*Penetrating Wound of Lung; Gangrene; Recovery.*

Corporal J. E. L., 90th Battalion, aged 24, was wounded at the Fish Creek fight on the 24th of April, 1885. He was shot in the chest while lying facing the ravine in which the enemy were concealed, at a distance of about one hundred yards from him. The bullet passed through the second left costal cartilage, beneath the sternum, downwards and outwards towards the right side, making its exit through the 7th rib in the mid-axillary line. Before being removed from the field he also re-

ceived a flesh wound over the right trochanter major, which, although not in itself serious, added greatly to his sufferings on the journey to Saskatoon and subsequently. He, with the other wounded from Fish Creek, arrived in Saskatoon on the 2nd of May, having been driven forty five miles in a lumber waggon over the "trail." The period of seven or eight days intervening between the time of his injury and his arrival at Saskatoon was one of very great hardship to a man in his condition. The weather was cold, especially at night, and windy, and a considerable part of the time wet; their only shelter was the ordinary "bell" tent, and there were neither the materials nor the facilities for making warm and soothing applications to the chest nor was there any suitable invalid diet. On arrival at Saskatoon his condition was very bad indeed. The greater part of the right lung was consolidated, and his breathing painful and rapid. There was also high fever and troublesome diarrhœa. Empyema followed, and on the 8th of May Deputy-Surgeon-General Roddick enlarged the wound in the right axillary region evacuating a quantity of pus which was very fœtid. The pleural cavity was then washed out daily with antiseptic solutions (carbolic, alcoholic and boracic at different periods); and from time to time portions of gangrenous lung tissue presented at the wound and were removed. In spite of these precautions, however, he continued to suffer from high fever, perspirations, fœtid discharge, and great weakness. On the 23rd of May, with the advice and assistance of Dr. Roddick, I attempted to make a dependent opening. The patient was etherized and an incision made in the eighth intercostal space, posteriorly. On reaching the pleura, however, the lung was found to be firmly adherent to the chest wall at this point. The wound was therefore closed, and the original axillary wound enlarged, and the cavity explored with the finger and long probes. A considerable amount of sloughy tissue was found lying unattached in the cavity, and was removed. The cavity was then emptied as well as possible, and washed out with weak carbolic lotion. On introducing the finger into the cavity it was found to be as large as a large-sized orange, and surrounded on all sides by pulmonary tissue. It was an intra-pulmonary cavity, and not, as we had supposed, a localized pleural sac. As he recovered from the ether he was seized with a severe and prolonged fit of coughing, in which he expectorated pus and fluid from the pleural cavity which had a distinct carbolic odor, and caused unmistakeable tingling in his mouth. From this time forward the pus was expectorated constantly and freely, and in a day or two was free rom smell. The wounds healed up rapidly All his symptoms subsided, and from this time his recovery was uninterrupted. In a few days he was able to be taken out into the air and sunlight, and in a couple of weeks was convalescent. He was one of the last remaining patients at Saskatoon, and embarked on the hospital barge on the 4th of July, and was discharged when he reached Winnipeg on the 15th of the same month. He has since enjoyed the best of health, and at the present time writes that he is quite well and strong. I have no doubt but that the thorough exploration of the cavity and the removal of sloughy tissue on the 23rd of May opened communication with a bronchial tube of considerable size, and that henceforth the cavity was kept freely evacuated by expectoration. This, I think, was the starting-point on the road to his recovery, which progressed with marvelous rapidity from that time.

CASE II. *Penetrating Wound of Chest.*

Private H. H. M., 10th R. G., aged 19, was wounded at Batoche on the 12th of May, 1885. When brought into the zareba he was suffering from dyspnœa and painful inspiration. He had also coughed up a little blood soon after receiving the wound. On examination, a bullet wound was found about an inch to the right of the vertebral column, opposite the fifth dorsal vertebra. The track of the bullet could be traced as far as the vertebral column, passing deeply through the muscles of the back, and the bullet itself (a round one) was felt beneath the skin at the angle of the left scapula. It was immediately removed, and the wounds cleansed and dressed, with iodoform. There were no marked chest symptoms until after his removal to Saskatoon, where he arrived on the 15th. The wound was then suppurating freely, and he suffered from considerable pain and uneasiness in the side and high fever. A few days later the left chest was found to be gradually filling with fluid; a hypodermic needle was introduced, and half a drachm of odorless sero-pus withdrawn. The chest filled rapidly, and the patient suffered from chills and fever. The pleural cavity soon became filled to the apex, and displaced the heart slightly. The flow of the pus from the wounds now became greatly increased, and pus was forced out from both

wounds, but especially from the posterior one (the wound of entrance of the bullet), on coughing. I then administered ether, and made a free opening through the 7th intercostal space and in the existing wound, and evacuated a large quantity of pus having a slightly fœtid odor. Through this opening also came, at this time, pieces of red cloth rom his tunic and pieces of his shirt and undershirt. On examination, while the patient was under ether, a long probe passed directly into the pleural cavity from the original wound. The bullet was found to have passed between the spines of the 5th and 6th dorsal vertebræ, close to the bodies of the bones, and to have roughened the edges of both spines. The opening of the cavity and the insertion of a large drainage-tube gave great relief, and all the active symptoms subsided promptly, although the discharge continued for a long time. His recovery was slow. The pleural cavity was washed out with antiseptic solutions from time to time, and nourishing food and stimulants were administered, and the patient was soon able to leave his bed and go out into the fresh air and sunlight in daytime. He was brought down to Winnipeg on the hospital barge, still very weak, and placed in the General Hospital there on the 15th of July under care of Dr. Kerr. He remained there for some time, and reached his home in Toronto, I believe, about the end of September. He is now perfectly well. There was great retraction of the chest-wall during convalescence.

In this connection I wish to mention briefly two other cases which did not come under my observation at the time their injuries were received, but which I saw later on.

Pvte. L., 65th Batt., was wounded on the 28th of May at Frenchman's Butte. He was struck on the posterior wall of the right chest, the bullet making its exit in front at a point nearly opposite. He suffered from severe respiratory symptoms and spat up some blood, and a penetrating wound of the chest was diagnosed. He recovered rapidly, however, and when I saw him, on the 12th of July, his wounds being then perfectly healed, there were no chest symptoms, no alteration in the conformation of the chest, and no physical signs to indicate that the pleural cavity or its contents had even been disturbed in any way.

A similar case was that of Sergt. F., N.W.M.P., who was wounded about a week later in Steele's engagement at Loon Lake. He also had very severe symptoms of pulmonary injury, dyspnœa, bloody expectoration, hurried breathing, etc., but recovered rapidly and perfectly without any serious pleural or pulmonary inflammation. I saw him on the 18th of July, on his return to Calgary to report for duty. He was then apparently in perfect health.

In gunshot wounds of the chest, the important point in prognosis is, of course, whether the bullet has penetrated the chest walls or not. In the surgical history of the American Rebellion the mortality in a group of over 8000 cases of penetrating wounds is given at 62.5 per cent., while in a similar group of non-penetrating wounds the mortality is 2 per cent. The four cases which I have reported show the difficulty of making an exact diagnosis, unless the patient can be kept under the observation of the same surgeon throughout his illness; and as our knowledge of such wounds must be mainly derived from military surgery, this is, of course, nearly always impossible.

Case II of this series was not thought to be a penetrating wound when treated on the field. Cases III and IV were so diagnosed, and yet, I think, the subsequent histories show that case II was undoubtedly a penetrating wound, and that the others were not. One could hardly help making such a diagnosis, however, with the symptoms shown by these men at the time of receiving the wound—cough, distressed and hurried breathing, and bloody expectoration. The fact that the symptoms did not persist beyond a few days, and that there was no evidence of pleural or pulmonary inflammation, or of the results of such inflammation, makes it quite clear. I think that these were only wounds of the soft parts of the chest wall, external to the pleura, and the blood expectorated at the time of the wound may be explained by the contusion produced by the bullet. I consider Case I an extraordinary recovery, under all the circumstances, and considering the nature of the injury and its termination in gangrene, which destroyed a large portion of the lung. Empyema followed, as a matter of course, but, fortunately, the axillary wound was favorably situated for the evacuation of the pus and the removal of the necrosed pulmonary tissue.

Dr. Shepherd congratulated Dr. Bell on the success of his cases—a success which would, before the days of antiseptic surgery, have been almost impossible. He thought that when empyema followed gunshot wounds that it should be treated as other empyemas—by free and dependent

drainage. He deprecated the probing of gunshot wounds, and related a case of pistol wound of the lung which was in his wards at the General Hospital last summer, where the wound healed by first intention, and, with the exception of spitting a little blood, and having a local area of dullness for a few days, no other symptoms were present, the patient recovering completely without the slightest fever. The treatment was altogether expectant, and no search for the bullet was made.

Dr. HENRY HOWARD said that fifty years ago he took lectures on surgery, delivered in Dublin by Sir Philip Crampton, Surgeon-General, who said, speaking of wounds received in the battle of Waterloo, that recovery generally took place if the ball passed through the chest and came out, but death generally followed if the bullet remained in the chest cavity. Much of the success now seen in these cases was due to drainage.

Dr. FENWICK said he regretted not being present when Dr. Bell read his paper. He spoke against being too anxious to remove bullets lodged anywhere. Too much probing often did great harm. If the bullet could not easily be reached, drain, and leave it. Nature generally encysts it, and so prevents its doing mischief.

CANADIAN MEDICAL ASSOCIATION.

Nineteenth Annual Meeting, held at Quebec, August 18th and 19th, 1886.

The nineteenth annual meeting of this Association was held in Laval University, Quebec, on the 18th and 19th of August. The meeting was opened by the Hon. Dr. Sullivan of Kingston.

After routine business and the presentation of the report from the Committee on obstetrics (the only Committee which made report), the PRESIDENT-ELECT, DR. T. K. HOLMES, of Chatham, Ont., was introduced, and delivered an address, which will be found elsewhere.

SURGICAL SECTION.

WEDNESDAY, AUGUST 18TH.

DR. GEORGE E. FENWICK, OF MONTREAL, IN THE CHAIR.

DR. DESJARDINS, of Montreal, read a paper on

KERATOSCOPY AS A MEANS OF DIAGNOSIS IN ASTIGMATISM.

After defining the term astigmatism, he said that errors of refraction affect the vision injuriously, although the optic nerve be healthy. It was formerly supposed that the fault was in the lens, but it is now known to be due (as was first pointed out by Donders) to the curves of the cornea. The lens, according to later investigators, partakes of the same deformities as the cornea. Accommodation is not without influence on refraction. After mentioning that corneal anomalies are detected by the keratoscope, Dr. Desjardins exhibited and described an instrument of simple construction made by de Wecker and Masillon, by which the meridians and amount of astigmatism can easily be determined. Many cases of slight astigmatism can be rapidly detected and suitable glasses prescribed. By the aid of this instrument, one scarcely needs to submit the patient to a subjective examination, and for this reason the author finds it especially useful in children.

DR. JAMES BELL, of Montreal, read a paper on

TRACHEOTOMY IN MEMBRANOUS LARYNGITIS,

in which he advocated dispensing with the tube in the after-treatment of tracheotomy. He said that the method of stitching the cut edge of the tracheal to the edge of the neck wound and the nose of the canula had proved of but little benefit in actual practice.

He preferred late to early operations in membranous laryngitis for the following reasons, viz.: (1) If patient were operated on early many would be operated on unnecessarily; (2) Extension of membrane takes place more rapid after tracheotomy; (3) If the obstruction is not rapidly produced, membrane is separated and expelled. The recoveries after early operations were 25·33 per cent.; after late operations, 5–10 per cent. A greater percentage recovery without operation. He next entered on the question as to whether the extension of the membrane is due to general or local causes, and thought that the weight of opinion is that extension is due to general or local causes, and gave a number of cases illustrating this point. After discussing the subject as to whether diphtheria is or is not primarily a local disease, he gave his reasons for not liking the tube in tracheotomy: (1) The tube never accurately fits; (2) When the tube is in place, the incisions into the trachea cannot be kept under observation; (3) Occasionally the tube, from not being in the middle line, and being left too long in the trachea, ulcerates through, and an artery may be opened; (4) When the tube is in the trachea, there is difficulty in expelling through it pieces of membrane; (5) The tube causes sometimes exuberant granulations and warty

growths. In place of the tube, Dr. Bell has devised an instrument which he thinks does away with the objections to the tube. It consists of a pair of "clips," which catch the edge of the trachea and hold it apart. They are held in position by a tape which goes round the neck. He had experimented with the clips in a number of dogs, and found that they held well, and that no ill results followed.

In speaking of the place of operation, Dr. Bell stated that he preferred the low operation, because there was more room, and also because, by it, we get further away from the disease. In the after-treatment of cases in which the "clips" are used, he withdraws the mucus, etc., from the trachea by means of a glass pipette. He said he did not believe in the close camp-bed which is now so often used, but preferred a free current of air. After operation he plugs the trachea or larynx above the wound with antiseptic sponge; this abords the discharges and helps to localize the membrane. Over the wound he keeps a piece of gauze, and he occasionally introduced vaseline into the trachea. When the tube is used, after two or three days, the breathing becomes dry, and the end of the tube becomes coated with inspissated mucus; below this, in the trachea, is a cone of dried exudation which helps to block up the passage.

Dr. Bell gave the histories of two cases of diphtheria in which he had operated and used his "clips." One case died, and the other—aged twenty-five months—recovered. In nine cases of tracheotomy, in which he has used the tube, all, with one exception, died.

He summed up by saying that the excessive mortality after diphtheria was due to defects in the after-treatment. The presence of a tube is a source of irritation and prevents the application of remedies.

Dr. A. L. Smith, in the discussion which followed, said that when house surgeon to a children's hospital in London, he had a large experience with cases of tracheotomy. He believes that the "clip," introduced by Dr. Bell, will prove of the greatest possible benefit and will, in all probability, reduce the mortality after the operation. He had seen one death from ulceration of the tube into a large vein.

Dr. Kerr, of Winnipeg, said that he had considerable experience in tracheotomy whilst in Nova Scotia. He had performed it twelve times, and never had a good result. He did not think tracheotomy is a good operation, and had seen most desperate cases recover without it. If Dr. Bell's treatment without a tube reduced the mortality, it would be a great gain. Dr. Kerr went on to say that the after-treatment of tracheotomy is always a source of anxiety; the tube is apt to get displaced during fits of coughing. In his last case he dispensed with a tube and stitched the edge of the cut trachea to the edge of the wound, as recommended by Post. He did not like this method, for when the patient's chin was depressed, the opening closed. He thought that with Dr. Bell's instrument he could do better. As to the question of the general or local origin of diphtheria, it was too large a subject to discuss at the present time. His last tracheotomy case lived three weeks and died of paralysis, so that it is not always the extention of the membrane that kills after tracheotomy, and the best after-treatment will fail to produce a good result. He was very doubtful about the good that would result from plugging the trachea above the wound.

Dr. F. J. Shepherd said that he had performed tracheotomy a number of times both in hospital and private practice. His first ten or a dozen cases were all fatal, but during the last two and a half years he had performed tracheotomy in private practice his results were not so good. He thought that the kind of instrument used did not matter much; it was important that the wound should be kept aseptic. He removed the tube as early as possible, never later than the fifth day; in one successful case he removed the tube on the third day; they were all cases of diphtheria. He preferred the low operation because the trachea is opened at a greater distance from the disease, there is more room, and it is not necessary to cut the cricoid cartilage. In the high operation division of the cricoid had to be frequently undertaken and often resulted in necrosis. Again, stenosis more frequently occurred after the high operation. Dr. Shepherd believed that after operation it was useful to have a warm room (75°–80° F.), and that the atmosphere should be saturated with moisture. He always used a croup or closed bed, and the steam of the kettle was conveyed into it by a huge spout. The inner tube was removed every hour, and the outer one on the second day, lime-water was occasionally dropped into the tube. He thought that the tube favored expulsion of membrane. With regard to the antiseptic plugging of the trachea, he did not think it of much benefit.

Very often the membrane extended, at time of the operation, below the wound, and if it did not, the continuity of the mucous membrane could not be interfered with. He had never seen the conical plug in the trachea described by Dr. Bell. All the cases of death after tracheotomy he had seen had been due to extension of the membrane. Theoretically Dr. Bell's instrument was perfect, but it remained to be seen what it would do in practice.

Dr. RUSSELL, of Quebec, had not seen half a dozen cases of diphtheria in twelve years, but during the last year he had seen a great many cases of membranous croup. He thought this disease was more fatal than diphtheria. He was formerly opposed on tracheotomy, but now thought early operation advisable: if the operation did not cure, it always relieved. He had performed tracheotomy six times with two recoveries. He thought Dr. Bell's instrument was a most ingenious one, and likely to prove very useful. In the after-treatment he was strongly in favor of using lime water spray.

Dr. FENWICK, of Montreal, said that he preferred the high to the low operation. Dr. Bell's instrument appeared to answer very well. Dr. Marshall Hall, many years ago, devised a somewhat similar instrument made of wire. He had seen one of Dr. Bell's cases treated with the "clips," and formed a most favorable opinion of the instrument.

Dr. FENWICK, of Montreal, read a paper on

TREATMENT OF TUBERCULOUS GLANDS OF THE NECK.

He believed that scrofulous glands are intimately connected with tubercle. After giving a sketch of the history of tubercle and Koch's discovery of the tubercle bacillus, he said that there must be some predisposing condition in the individual so that he can contract tubercle—the proper soil must be present. The glands of the neck are specially liable to infection, especially the submaxillary and those over the large vessels. Enlargement is rarely single, and occurs generally at first one side of the neck only. Often there are no external signs of softening of the gland, but when the glands break down and open externally and indolent ulcers and sinuses are left. The disease generally first shows itself in a single gland and then spreads to other parts; very little is known of the mode of entrance of the tubercle bacillus. In scrofulous enlargement of the glands of the neck the author strongly advised early removal of enlarged glands. After removal the general health of the individual improves; if they are left, the patient runs the risk of general tuberculosis, and if he recovers it is with impaired health and a number of disfiguring scars on the neck. The author preferred removal to laying open and scraping out the gland or the cautery puncture of Mr. Treves. He related a number of cases in which he had removed large numbers of glands from the neck. In his first case, which was operated on in 1873, he removed some half dozen glands from the neck beneath the sterno-mastoid; the scar was now hardly to be seen. Dr. Fenwick shewed a number of photographs of cases, before and after operation, where the results were most admirable, the cicatrices being hardly perceptible.

Dr. KERR, of Winnipeg, said that if we accepted the principle of the identity of scrofula and turbucle much confusion would be removed. He was not satisfied with the results of operation and did not now operate so often as formerly; he found the operation not only very tedious but difficult and dangerous, and the results were not always so good as represented. Dr. Alexander, of Liverpool, who formerly operated some twelve years ago very frequently in these cases, has now given up the operation.

Dr. SHEPHERD, of Montreal, confessed that the results of operation were not always so perfect as were described by the enthusiastic advocates of the operation, but in many cases the results are entirely satisfactory. Occasionally there are high temperatures after operation; sometimes attacks of cellulitis. He had operated in a good many cases, and had removed as many as twenty to thirty glands at a time. Apparently solid glands not infrequently come to pieces during removal, and are found to be quite soft in the centre. These conditions always complicate the operation. After incising the deep fascia, he prefers removing the gland with the fingers, and an occasional cut with a knife.

He has never had any accident attending the operation. Although he has had no experience with Treves's cautery puncture, he does not think it suitable for glands deeply placed. In sinuses and scrofulous ulcers, he has had most excellent results from scraping out the parts with Volkmann's spoon.

Dr. TRENHOLME, of Montreal, read a paper on

SOME DETAILS OF UTERINE AND OVARIAN OPERATIONS.

He said the instruments used in these operations need not be numerous or complicated. After describing the usual precautions that should be taken regarding the cleanliness of hands, sponges, and instruments, he said that he prefers No. 1–20 shoemakers' thread to any other form of ligature. Before used the thread should be immersed for twenty-four hours in pure carbolic acid, and not put into water at all. In closing the abdominal wound, he uses silver wire for the deep sutures and horsehair for the superficial. He laid great stress on the importance of not enclosing any muscular tissue in the suture. The incision should be midway between the umbilicus and pubis, and should not extend to within one and a half inches of the pubis. He advised short incisions of one to two and a half inches. Muscle should never be cut in the incision, as it gave great trouble afterward

The pedicle of the tumor should be ligated in small segments, and the large vessels should be ligatured separately and the ligature cut short. The cavity of the abdomen should be thoroughly cleansed with sponges, and drained when necessary. He objects to abdominal bandages, and has only used them after the removal of the largest tumors. He allows his patient after the operation to move freely in bed; this favors the reposition of the bowels. In uterine fibroids, when large, he always divides the mass in the median line, then each half is enucleated. The stump should be cut in the shape of a V, and the edges brought together with a running suture and quilted with the shoemaker's stitch. He has found linseed-tea enemata of great service after operation; fomentations to the abdomen were also very beneficial. No after medicinal treatment is needed, except when there is vomiting; in this he has found sipping hot water useful, and also ipecacuanha in homœopathic doses. He uses the third dilution.

Dr. MACFARLANE, of Toronto, would have liked to hear Dr. Trenholme say more about dietetics. In his operation he had found vomiting to be a very troublesome complication; warm water with a flavoring of brandy he had found of great service in these cases, also frequent small doses of epsom salts as recommended by Lawson Tait. He never gave any medicine at all when there was any threatening of peritoneal trouble. He never used drainage unless the adhesions were extensive.

Dr. SHERMAN, of Ogdensburg, would like to have heard more details regarding the preparation of the patient, also as to whether he referred, when speaking of fibroids, to extra or intra-mural growths.

Dr. MACDONALD, of Wingham, Ontario, would like to have heard more details as to the closure of the wound, and also as to the value of the clamp in securing the pedicle, and whether operation for ovarian tumors should be performed early.

Dr. KERR, of Winnipeg, had seen hernia follow the operation, due to failure of union in central portions of wound. He would like to know why Dr. Trenholme objected to including muscle in his sutures.

Dr. SHEPHERD, of Montreal, thought that wounds of the abdomen are much the same as wounds of other parts, and that abdominal surgeons make a great ado about their special methods of healing this abdominal incision. General surgeons, who are operating every day in every part of the body, have no fear of including muscle in their sutures. He did not understand why an abdominal wound should heal so differently from wounds in other parts. So far as he himself was concerned, in performing abdominal section, he treated his incision as an ordinary wound. He used silk or catgut sutures and passed them through the whole thickness of the wall of the abdomen; union invariably took place by first intention. Every gynæcologist thinks it incumbent upon him to have some special mode of treatment of the abdominal incision, and seems to think that general surgical principles are not applicable to it. Dr. Shepherd had not much faith in ipecac used in the third dilution.

Dr. FENWICK said that he had operated a number of times for ovarian tumors with fair success. He agreed with the remarks of the last speaker. He always used silk sutures and objected to horsehair because knots made in it did not hold well. In treating the pedicle he first clamped it and then tied all the large vessels; afterwards, he tied the pedicle with the Staffordshire knot and removed the clamp. He had used hot water occasionally to cleanse the abdomen.

Dr. TRENHOLME, in reply, said he spoke of interstitial fibroids. He formed the pedicle out of the labial borders of the uterus in such a way that he left the broad ligaments to sustain the pelvic viscera. He used the shoemaker's stitch to secure primary union. With regard to the external wound he thought that the conditions found in the abdominal cavity existed nowhere else. It is of the greatest importance to secure primary union so

that there shall be no subsequent hernia. For vomiting he used hot water over the wound, and ipecac in minute doses. In preparing the patient he avoided purgatives as much as possible. In cold weather he kept the extremities of the patient wrapped up in cotton-wool.

Dr. Shepherd, of Montreal, next read a paper on

EXCISION OF THE TARSUS IN TUBERCULOUS DISEASE OF THE BONE.

He commenced by saying that formerly when there was carious disease of the bones of the foot the only resource was amputation, but with the advent of antiseptic surgery and the establishment of conservative principles of treatment, other methods of procedure have been adopted with success.

In cases of tuberculous and carious disease of bones the necessity for amputation is not immediate, and it is the duty of the surgeon to endeavor first to remove the local disease before sacrificing the foot. It is not necessary to perform a Hey's, Chopart's, or Syme's amputation in these cases, but merely to remove all the disease, however extensive The reader of the paper illustrated this principle by giving the histories of several cases. In one case, where there was disease of both feet, he removed on the right foot the cuneiform, scaphoid, cuboid, and bases of the metatarsal bones and on the left the lower end of the tibia, astragalus, part of the os calcis, the scaphoid, and cuboid. The result was excellent, and the patient, a girl aged seventeen, was able to walk about comfortably. In children it is often sufficient to remove the diseased portion with Volkmann's spoon, and in them amputation is hardly ever required.

Dr. Macfarlane, of Toronto, had followed out the principle advocated by the reader of the paper for years. He believed it is the proper method of treatment, and should be extended to caries of the spine. In dressing the wound left after excising tarsal bones he never stuffed the wound with any thing, but placed the foot in a good position and left the rest to nature.

Dr. Dupuis, of Kingston, said he recently had a case of disease of all the tarsal bones in which he performed amputation; afterward the tibia necrossed and he had to reamputate. He also reported a case of frost-bite in which he had removed the greater part of the tarsus.

Dr. Holmes, of Chatham, remarked that Dr. Shepherd's paper was a good examplification of conservative surgery. He had several times excised the ankle-joint with the best results.

Dr. Kerr, of Winnipeg, said that patients, after operation, should not be allowed to walk about too soon, as they were apt to have a splay foot. He did not believe in leaving the wound to nature altogether, but preferred keeping it in an aseptic condition.

Dr. Russell, in Quebec, also insisted that the wound should be carefully protected, and that antiseptic dressings should be applied. If the wound were left to nature it would soon become putrid, and all the dangers incident to such condition would be incurred.

Dr. Fenwick said he could mention a number of cases in which he had resected the tarsus with the happiest results. He related the case of a gentleman (a medical man) who had been wounded at the battle of the Alma, and had carried the bullet in his heel for nearly thirty years. The os calcis was trephined, and the bullet removed, with the result of a rapid closure of the cavity and a useful foot.

Dr. Kerr, of Winnipeg, read a paper on the

EVACUATION OF AN ABDOMINAL HYDATID CYST.

The patient was an Icelander, who came into the Winnipeg Hospital last winter with a large abdominal tumor. From the history, and as the result of exploratory puncture, the attending physician, Dr. Whiteford, made the diagnosis of hydatid cyst, and handed the case over to Dr. Kerr for operation. The operation was performed in two stages as recommended by Volkmann. A cut was first made down to the growth, and six days after it was incised. To open the cyst he had to cut through two inches of the liver. The cyst was then emptied and washed out with a solution of iodine. The patient did well, and went home in two months. He marked that these are rare cases. Up to 1880, only 155 cases have been reported. This is the second case that has been in the University Hospital. The other patient was operated on but died on the table.

Dr. Eccles, of London, Ont., related the history of a case which had been treated a year ago in the London Hospital.

THURSDAY, AUGUST 19TH.

Dr. Kerr reported cases of

GUNSHOT WOUND OF THE HIP-JOINT.

Both cases were caused by the incidental discharge of small shot. The soft parts were much torn, the trochanters in both cases were split, and the joints laid freely open. In the first case the patient was not seen till three weeks after the

accident, and had had no treatment, his condition was deplorable. The whole wound was in a sloughy condition and horribly fetid. The patient was in a septic condition. The wound was thoroughly cleansed, the sphacelated portions freely excised, and the wound irrigated and packed with iodoform gauze; an anterior wire splint was also applied. The improvement at first was marked, but the patient died of septicæmia and exhaustion in a short time. The second case was seen immediately after the accident; the wound was treated in the same way, and the limb fixed in an anterior Smith's splint; a posterior splint was also employed, so that immobility was secured, and recovery with a useful limb resulted. Dr. Kerr referred to other methods of the treatmeat, viz., excision and amputation. In these cases the mortality was high. He brought these cases before the Section in order to show what could be done by conservative methods in such cases.

Dr. Clarke, of Toronto, said that a number of cases of gunshot injuries of the hip were reported in the *Surgical History of the American Rebellion*. He had seen several cases treated when with the Federal army in Virginia. They were treated under canvas, and did well.

Drs. Russell, Fenwick, and Shepherd also joined in the discussion.

Dr. Buller, of Montreal, read a paper on

THE TREATMENT OF ACUTE PURULENT OPHTHALMIA.

He remarked that eyes are now seldom lost in these cases, some use hot applications, others cold; some use astringents, others do not; some use antiseptics, others rely on frequent and thorough washings. All are agreed on the necessity of frequently cleansing the diseased eyes. Many remedies are used, as quinine, boracic acid, corrosive sublimate, etc. The antiseptic treatment is still on trial. Solutions used as germicides must be strong, weak solutions are of little value as antiseptics. He had lately treated three cases of acute gonorrhœal ophthalmia. He first used boracic acid, and afterward a solution of corrosive sublimate, the latter in the strength of 1 : 2000 without improvement, but the application of a solution of 1 : 1000 was followed by immediate and marked improvement. The patient was discharged cured in twenty-four days. In the other case the patient was a child, aged three years, with acute vaginitis; under similar treatment patient rapidly recovered.

In the third case, also one of genorrhœal opthalmia, there was sloughing of the cornea. He treated it by hot fomentations and washes of boracic acid and sublimate solution used warm. Improvement immediately followed, the slough separated and a clean ulcer was left which soon healed.

Dr. Buller thinks that in general practice a rigid cleanliness is not sufficiently carried out. With regard to cold applications, he thinks they are the best, but whilst applying them the cornea should be closely watched; if there is any cloudiness, hot applications should immediately replace the cold, and the cornea will be saved.

Drs. Smith, Russell, and Fenwick took part in the discussion which followed.

Dr. Shepherd, of Montreal, read the notes of a case of

AINHUM

which he had treated in the Montreal General Hospital. The disease affected the little toe of the right foot of a negro, æt. forty-seven, born in North Carolina. The little toe became affected some six years before. He first noticed a small ulcer on the digito-plantar fold, then a constriction surrounded the toe at this point which gradually deepened. The toe was much larger than normal. He suffered greatly when walking. The toe was amputated, and on dissection appeared to consist of much thickened skin and fibrous tissue. The bones of the toe were much atrophied and the joint had disappeared; the proximal phalanx looked somewhat like a claw. The reader of the paper then gave a short sketch of the history of the disease, saying it was first accurately described by Dr. Silva Lima, of Brazil, that it was a disease confined to the dark races, and was more common in some families and more in men than women. It sometimes affects the fingers and even limbs. The disease, if left to itself, lasts about ten years, and ends by amputating the member affected. The word "ainhum" is a negro word, and means "to saw."

Dr. Fenwick, of Montreal, reported a case of

AMPUTATION AT THE SHOULDER-JOINT FOR MYELOSARCOMA OF THE ARM.

Patient, a woman, aged forty-seven years, seven months pregnant, came to Montreal General Hospital in the spring of the present year, with a large ulcerated tumor a little below the shoulder of the right arm, and a smaller tumor near the biceps. Two years ago she had received a blow, and within three weeks perceived a small lump at the site of injury. It grew rapidly and was removed. She was told that it was a fatty tumor. It soon return

ed, and this time plasters were applied by a "cancer doctor," which burnt the tumor, and caused the ulcerated appearance which was seen when admitted to hospital. Dr. Fenwick amputated the arm at the shoulder joint, and patient did remarkably well, never having a temperature higher than 99° F. On examination, the tumor proved to be a myeloid sarcoma. This was the first case Dr. Fenwick had seen in which the myeloid tumor first-affected the tissues external to the bone and periosteum.

Dr. A. Lapthorn Smith read a paper on

ALEXANDER'S OPERATION AND THE TREATMENT OF DISPLACEMENTS OF THE UTERUS.

After describing the operation minutely, and also giving a discourse on the anatomy of the parts, Dr. Smith went on to say that the round ligaments are really muscles, and are in a state of tension, except during coition. They are the homologues of the cremaster muscle in the male. Dr. Smith considered that the risks of the operation are great, and that it is not a justifiable one, except in extreme cases, and when performed did not permanently cure displacements of the uterus. He prophesied that it would soon fall into disuse. The author said that displacements of the womb could be corrected by lessening congestion, by keeping the liver clear and the lower bowel empty. The paper was illustrated by diagrams and tables.

Dr. Trenholme agreed with Dr. Smith that the operation was one that would soon be known only in history. He had operated once, but had failed to find the ligament. He, himself, many years ago, suggested a similar operation.

Dr. Shepherd had frequently dissected the round ligament, and had performed operations on the dead subject. The uterus could be easily elevated by pulling on the ligaments. He did not think the fact that a few muscular fibres had been found on the ligament proves that it is now in active use as a muscle; it is, rather, a fœtal remnant of the ligament of the Wolffian body, and the homologue of the gubernaculum testis of the male.

Dr. Ahern, of Quebec, said that the round ligament is frequently abnormal, and that at its insertion is often much atrophied. In cases where the the uterus is fixed, tightening it will not correct displacements.

The Section then adjourned.

OFFICERS ELECTED FOR NEXT YEAR:

President.—Dr. J. E. Graham, of Toronto.

Vice Presidents.—*For Quebec*, Dr. Russell; *for Ontario*, Dr. Dupuis; *for Nova Scotia*, Dr. Wickwire; *for New Brunswick*, Dr. Currie; *for Manitoba*, Dr. Crowther.

Local Secretaries.—*For Quebec*, Dr. J. Bell; *for Ontario*, Dr. McKeough; *for Nova Scotia*, Dr. Trueman; *for New Brunswick*, Dr. Lunam; *for Manitoba*, Dr. Kerr.

Place of Next Meeting.—Hamilton; Chairman of Committee of Arrangements, Dr. Malloch.

Progress of Science.

THE TREATMENT OF OTORRHŒA.

Common as otorrhœa is very few physicians understand how to treat it intelligently and properly. The treatment is very simple and nothing is more satisfactory in its results.

Supposing that the otorrhœa is uncomplicated with fungous granulations or polypi, the ear is first cleansed with a syringe and warm water. Then it is to be dried out thoroughly by twisting a soft rag and passing it down to the bottom of the meatus so that it will absorb all moisture from the ear. Next sufficient boracic acid is put into the ear and worked down upon the drum so as to cover its surface. The powder should not be packed down upon the drum. It is allowed to remain there 24 hours, when the ear is again syringed, dried out, and the powder reapplied as before. The treatment must be repeated daily until all suppuration ceases. After that twice, or even once, a week is often enough to repeat the application. The dry powder must be applied to the ear for two or three weeks after all suppuration has ceased. This is the treatment of uncomplicated otorrhœa in a nut shell, and the result is nearly always very satisfactory. I have the common acid rubbed in a mortar till it assumes a granulated form, like granulated sugar, and use it in preference to the minuter powder of different firms, because it goes down to the bottom of the meatus easier and does not hang to the walls so persistently as the fine powder.

PRURITUS VULVA.

Martineau (*Annales Medico-Chirurgicales*) notes that this arises sometimes in the course of affections unconnected with the vulva, at others during the evolution of a disorder or lesion of this part. In the first class are intestinal worms, the oxyuris in particular; these wander at night over the neighborhood of the anus and genital organs. They should always be looked for there and then, especially in children, where there is an absence of any direct cause. Tinea tonsurans and the

pediculus pubis are other causes. Affections of the bladder, vegetations, and polypi of the urethra may lead to it. Glycosuria, also, either temporary in wet nurses, those who take much sugar, or permanent, as in diabetes. In the second category may be ranged pruritus, consecutive to various primary or secondary inflammations of the vulva, which may be simply local, or proceed from a general diathetic or constitutional cause, as tuberculosis, eczema, herpes, psoriasis, lichen, epithelioma. Vulva pruritus may be purely nervous, and then appears without any manifest lesion of the mucous membrane or skin; at times it may be associated with urticaria. The diabetic form is best treated with the effervescent citrate of lithia, with addition of a little arseniate of soda. Locally, during the acute stage, lotions of bromide of potassium or of chloral are recommended, and in the chronic phases a weak solution of corrosive sublimate and alcohol.—*Edinburgh Medical Journal.*

HYDROCHLORATE OF COCAINE IN THE VOMITING OF PREGNANCY.

Weiss, of Prague, has used this remedy successfully in case of vomiting in pregnancy which had resisted all previous attempts at relief. The patient was weak and anemic, of a certain disposition, and had suffered in three previous pregnancies from persistent vomiting: in the present pregnancy her condition was serious. Weiss described:

℞ Hydrochlorate of cocoaine.....gr. ij;
Alcohol, enough to dissolve.
Water..... ..... ʒ v.
S: One teaspoonful every half hour.

After the sixth dose three tablespoonfuls of milk were well borne; after the eighth, a cup of broth with egg, without vomiting. After the sixteenth dose the patient ate with relish chicken broth, slices white chicken meat, and drank a glass of wine, without vomiting. The drug was then withdrawn for a time, owing to an increased frequency of pulse and respiration; but hourly doses were subsequently given, with the result of entirely checking the vomiting and enabling the patient to regain her former strength.—*Edinburgh Medical Journal.*

THE TREATMENT OF SICK-HEADACHE.

Dr. W. Gill Wylie, of New York, has produced excellent results with the following method of treatment: So soon as the first pain is felt, the patient is to take a pill, or capsule, containing one grain of inspissated ox-gall and one drop of oil of gaultheria every hour until relief is felt, or until six have been taken. Dr. Wylie states that sick headache as such is almost invariably cut short by this plan, although some pain of a neuralgic character remains in a few cases.—*N. Y. Med. Journal.*

PRESCRIPTION FOR ALOPECIA.

Oil of sweet almonds and stronger liquor of ammonia, of each, one ounce; spirit of rosemary, 4 ounces; honey water, 2 ounces. Mix. This lotion is to be rubbed well into the roots of the hair and over the scalp, and the head should afterwards be washed with clear, soft water—rain or distilled water if possible.

ANOTHER REMEDY FOR VOMITING OF PREGNANCY.

Still another remedy for this much medicated condition has been found in the hydrate of cocaine. When everything else had failed, when hope had fled and absorption seemed the only alternative, Dr. Holtz gave his patient a hypodermic injection of cocaine, and the vomiting ceased. The writer is happy to record the instance as one of the few in which cocaine has appeared to be good for anything, except for local anesthesia.

THE CANADA MEDICAL RECORD.

A Monthly Journal of Medicine and Surgery.

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MONTREAL AUGUST, 1886.

CANADIAN MEDICAL ASSOCIATION.

In another column we give a report of the meeting of the Association at Quebec on the 18th and 19th of August. For the greater portion of it we are indebted to the Philadelphia *Medical Times.* The number in attendance was not large, but it was representative. Ontario sent a good number of members, Toronto being well and ably represented. Montreal, considering the number of her leading medical men at present in Europe, had a good quoto present. Winnipeg sent an able representative in Dr. Kerr. The proceed-

ings were harmonious, and quite a number of interesting papers were read, especially in the Surgical Section. We were, however, sorry to find so many men, principably in the medical section, who were on the programme, as readers of papers, fail to put in an appearance. This is not right. If a member informs the Secretary of his intention to read a paper, he should make a point of being in attendance. The one regret of the meeting was the absence of the majority of the profession of the city in which the meeting was held. Indeed very few put in an appearance. What reason they had for this action is, of course, alone known to themselves. It is true the Association went to Quebec without an invitation, and were, in consequence, quite prepared not to have any public hospitality extended to them. No fault, so far as we heard, was found for this break in the usual programme of the Association. But the absence from its meetings of the Quebec members was so marked as to call forth very general comment. The city, which nineteen years ago was the means of organizing this Association, was hardly expected to all but ignore the fact that it had again returned to the place of its birth. It was a very pleasant feature of the meeting the large number of representatives who were present from the United States, as also was the active part they took in the proceedings. Detroit, Buffalo, Ogdensburg, Portland, and Burlington, Vermont, had some of their ablest men in attendance. Hamilton is the next place of meeting, and we believe the decision is a wise one. Hamilton is centrally situated, and has a body of professional men who will appreciate the advantage of having the Association assemble in their midst. The enthusiasm of those who were present at this last meeting was very marked, and the determination was expressed, not to allow its partial failure to interfere in any way with the future success of the Association.

YELLOW FEVER AND ITS PREVENTION.

In this issue our readers will find a timely and highly important communication on the etiology, and prevention of yellow fever by inoculation. We are indebted to Dr. Gererd, for having prepared it as a special contribution to the RECORD, and to our old friend, Dr. Wolfred Nelson, late of Panama, South America, for its translation.

For many years—1826 to date—the city and Isthmus of Panama have been recognized hotbeds of yellow fever. In 1868 there was a serious epidemic in the city of Panama. It appeared again as an epidemic in 1880, and it remained endemic and endo-epidemic up to the summer, when, in May and June, it assumed the proportions of an epidemic of the first class, killing forty victims daily. This fact was first announced in the *New York Herald*, and later by the American papers generally in May. Later the *New York Herald* stated that the mortality of forty per diem understated the truth.

The filthy condition of the cities of Panama and Colon, in the American Isthmus, may be imagined, but the reality is almost incredible. The city of Panama—modern Panama—was built in 1688 as a strongly-walled, massively-constructed city. To-day, speaking of it and its suburbs—now extensive—it is without water supply or drainage, properly so-called. Its water is derived from deep wells, built by the early Spaniards, the majority on the outskirts of the suburbs. Three of the largest wells from which watermen purchase water to sell in the city, are at Cocoa Grove. The wells are within three hundred feet of a new cemetery, they are in a ravine many feet below its surface, while they drain a level fully sixty feet below the cemetery. The cemetery is, without exception, the most flourishing bonanza in the Isthmus. The owner of the wells, Senor Don Nicanor Obcarrio, has a special concession from the Government of the State of Panama to bury the dead. Whether they are buried in his cemetery or in the foreign Jewish or Chinese cemeteries he exacts his fee. Regarding the cemetery, at the edge of the wells, between July 15th, 1884 and April 12th, 1886, it had actually received 3,884 bodies for interment in the ground, apart from several hundreds buried in the *bovedas* or stone vaults. In the month of November, 1884, the Canal Company alone buried 652 officers and men on the Isthmus, principally from yellow and malarial fevers, tropical dysentery, &c., &c. The Canal hospitals in Panama have had as many as seventeen deaths in a single day.

Such is Panama, well and fitly named the Gate to the Pacific, by Captain Bedford Pim, R.N., in one of his interesting books. The Isthmus of Panama is a constant producer and distributer of yellow fever. The Mexican West Coast epidemic of 1883 and 1884 was traced to a yellow fever corpse landed by a steamer from Panama.

That death has such a monopoly can easily be understood, when the drainage and water-supply, so-called, are considered. In both Panama and

Colon over-crowding has obtained, to an incredible extent, but in Colon the inhabitants have pure drinking water, and not cemetery drainage as in Panama. In Panama proper the natives throw all kinds of filth over the sea-walls ; as it is not washed away by the tides, there it remains, an insult to the eye, a foul, reeking, death-dealing mass. In the suburbs the inhabitants throw their excretæ and filth into lanes and vacant lots, this, plus heat and moisture generate poisons best left to the understanding of our *confreres*, God forbid that it should ever reach their nostrils. A few drains within and without the city are never flushed except by the rains. During the dry season, December to May, they are simply so many receptacles for excretæ. The odors that pour forth from them are unbearable.

It ceases to be a matter of wonder that, under such conditions, the Canal hospitals offered a rich field for clinical observation for Dr. Gererd and his Canal *confrères*. Drs. Meurrisse, Didier, Vernial and the late George W. Nelson.

Dr. Gererd's special observations on yellow fever and its specific microbe extended over three years. He had an able staff of assistants, and the finest of appliances that science could suggest, and it was his singular good fortune to recognize and isolate and cultivate the special microbe. Its propagation was brought about by Pasteur's well-known methods and apparatus.

With Dr. Gererd it was more than a mere matter of scientific enquiry pushed to a successful issue—with him it was a matter of absolute faith, and he abundantly proved it by inoculating himself with culture-microbes, and finally resorted to a crucial test, in allowing himself to be bitten by mosquitoes, that had just fed on a yellow-fever patient. Dr. Finlay, of Havana, we believe, was the first yellow fever expert to point out the propagation of yellow fever by mosquitoes. Dr. Gererd's experiments are a highly important contribution to tropical medicine. His three years of persistent labor were crowned with success, and he deserves all the praise that science and his Government (he is a Parisian) may accord him.

Yellow fever is one of those fearful scourges in whose dread presence physicians feel powerless. So little is known of the cause producing it and the great variety of treatments are a silent but tacit admission that our tropical *confrères* hitherto have been working in darkness, some epidemics killing 75 and 80 per centum, others 8 and 10. The last great epidemic at New Orleans and vicinity is credited with having swept away 30,000 victims.

Yellow fever on the Isthmus of Panama is nearly always fatal, that is, true specific yellow fever. Of twenty-seven admissions to the Canal hospital, Panama, for a series of weeks but one recovered.

The Dingler Expedition to Panama—fully endorses the above. M. Dingler, Chief of Works of the Panama Canal, accompanied by his wife, and family, in all a party of thirty-three, including Canal engineers, arrived at Colon on the 29th of October, 1883 ; up to January, 1885, or in fourteen months, fourteen of the party had had yellow fever with but a single recovery, M. Dingler losing his whole family, wife, son and daughter. The recoveries truly are the exceptions that prove the rule. The malignancy and intensity of the disease there destroys the blood. Intense malarial poisoning is supposed to be an important factor, no doubt increased by the unsanitary conditions already described.

Dr. Domingo Freire if we remember rightly, was the first observer to recognize a microbe in yellow fever and to conduct experiments and publish the results. One of his first contributions on this subject was translated from the Spanish by Dr. Wolfred Nelson, and published in the RECORD some three years ago. *Science* in a recent issue refers to Dr. Domingo Freire's excellent work at Rio de Janeiro, Brazil, and states that in 7,000 inoculations by him, only eight died of the disease, while 3,000 inoculated persons living under the same conditions were victims to the disease.

Dr. Joseph Holt, the very able and indefatigable President of the New Orleans Board of Health, whose quarantine regulations are undoubtedly the best known, recently has used his influence to secure the passage in Congress of a Bill to enable an American Commission to visit the yellow fever centres and study the disease, and the methods of skilled men like Dr. Domingo Friere and Dr. L. Gererd. Should the Commission verify the experiments of the gentlemen named, preventive medicine in the tropics will have entered on the grandest discovery of modern times, one that will protect millions of people.

The RECORD has been promised a series of original papers on yellow fever, by physicians of recognized standing in Brazil, Mexico, and at Panama. They will appear as received, as well as a series to be written in Cuba, the hot-bed *par excellence* of the disease.

THE CANADA MEDICAL RECORD.

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THE QUININE TREATMENT OF WHOOPING COUGH.

BY FRANCIS W. CAMPBELL, M.A., M.D., L.R.C.P. L.

Professor of the Theory and Practice of Medicine, Medical Faculty of Bishops' College.

[Read before the Canada Medical Association, Quebec, Aug. 18, 1886.]

I do not propose to enter upon a description of whooping cough, its history, etiology or sequelæ, but simply to make a few remarks upon a plan of treating the disease, which I have followed for the past seven years, and which has yielded me well nigh complete success. Although not usually a fatal disease, yet it is so prolonged, seldom lasting less than two months, and often continuing four to six months, with symptoms so distressing, especially to those whose duties bring them continually in contact with the little patients, that any plan of treating it with a more than usual amount of success, must be deserving of our best attention. It may, I think, be asserted with truth, that generally the family physician does not realize the torture which parents experience when the distressing spasms seize their children. The physician is too apt to look upon the disease as one that must run its course; and beyond giving an expectorant mixture, possibly containing some antispasmodic, and ordering some form of counter-irritation, is content to let time do most of the work. That under such treatment patients will get well, is doubtless true, but they do so, leaving behind a constitution sorely tried, sometimes all but completely wrecked. I, of course, am aware of the many remedies which have been suggested for the treatment of whooping cough. Thus I have tried hyoscianus, belladonna, the bromides, antimony, chloral, salicylic acid, and a host of others. I have used emetics of alum, ipecac, and sulphate of copper. But all have failed, as a rule, to give more than temporary relief. I have not been conscious of the disease being in any way cut short. In 1879, it so happened, that in my own family I had one of the worst cases of the disease it has ever been my lot to meet with. I tried several remedies without the slightest benefit. I consulted all the standard authorities within my reach, but got little information to satisfy me. I devoted some nights to hunting up articles on whooping cough in a variety of journals within my reach, but I did not meet with any satisfaction till I came across a paper in the Canada Medical Record for July, 1873, by Dr. Dawson, Professor of Diseases of children in the University of New York, on the treatment of whooping cough by quinine. In this paper it is stated that Dr. Binz, of the University of Bonn, was, in 1870, the first person to direct attention to this plan of treatment, and to state that it had yielded him invaluable results. He considered whooping cough to be a neurosis of the pneumogastric nerve, caused by infectious and irritating mucous, that has accumulated in the pharynx and larynx. By experiment he found that quinine destroyed, even when highly diluted, all structures found in normal mucus, and he presumed (and he says correctly) that it would do the same on the mucus of pertussis. In the American Journal of the Medical Sciences of 1871, there is a paper by Dr. Let-

zerich, of Germany, in which he advances a theory regarding whooping cough, which would seem to indicate quinine as scientific treatment for the disease. In this paper he says he has discovered a fungoid growth which vegetates in the epithelium of the air passages, and by its irritation causes the convulsive attacks of coughing. He says that the expectorated mucus of whooping cough patients contains masses of brownish red spores with occasional threads of mycelium. These spores he introduced into the trachea of rabbits, and in a short time they became affected with a noisy and violent cough identical with that of whooping cough. These rabbits were killed, and the mucus in the air passages examined, and it was found to contain precisely the same spores, as he found in the sputa of human subjects with pertussis. Writing of the quinine treatment, Dr. Dawson says: "If the Fungus theory of Dr. Letzerich be correct, I can readily account for the destructive influence of quinine on fungoid development. Its power consists in removing the cause of local irritation, which gives rise to reflex phenomena, evidenced by the whoop. For my part I consider pertussis an affection of the mucus membrane of the pharynx and larynx, and the "whooping" as simply reflex. I do not consider the rapid cure affected by quinine due to the simple distruction of the fungus, but also to its nauseating bitter taste. In whooping cough there is an abnormal secretion of thick tenacious mucus from the mucus membrane of the pharynx, which may or may not excite a paroxysm, but which certainly aggravates and prolongs it. This is proved by the fact that the moment this mucus is removed by either coughing or vomiting the paroxysm ceases. The effect of the quinine in solution, when swallowed is instantly, from its bitter taste, to excite a free secretion of thin mucus from the bucal mucus membrane and salivary glands. This softens and renders easy of dislogement the thick tenacious mucus lodged in the pharynx. The frequent use of this quinine keeps up this action, and in a short time there is no accumulation of the thick tenacious mucus, so that with each act of coughing the mucus is readily loosened and expectorated. Now as to the method of administering the drug. I would wish to direct very particular attention to this portion of my paper, because in Professor Peppers' late work, just completed, in the article on Pertussis it is said: "Quinine may be given in solution, combined with simple syrup, liquorice also disguises the taste admirably for children." I am sorry to see in so recent an article, and in so able a work, advice so pernicious and so calculated to bring discredit on the quinine treatment. Let me state most emphatically that if good results are desired, the quinine must not be disguised in any shape or form, nor must anything be given for several minutes afterwards, having this object in view. If there is one point on which all advocates of this treatment are agreed it is that it must be given pure and alone. Wherever I have found apparent failure attend the use of this drug, it has been when parents have disregarded my express instructions on this point.

The directions for the quinine treatment may be tabulated as follows:

1. Give the quinine (sulphate preferable) dissolved by and in pure water. For children under three years from gr. ii. to gr. viii., and for older children and adults from gr. x to gr. xl, to the ounce of water.

2. Give not less than one teaspoonful every hour, or at longest every 2 hours, during the day, and several times during the night.

3. Give nothing with or afterwards for at least five minutes to destroy the taste or wash out the mouth.

4. Continue to give it although the first few doses may be vomited; repeat it at once.

5. Be sure that the quinine is pure and that it is thoroughly dissolved.

I have now the notes of over one hundred cases of whooping cough treated by quinine. This embraces all the cases which have come under my care, since 1879, and I have yet to meet with a failure. Some have been longer than others in yielding, but as a rule within a week, the effect is most evident, and, as a rule, you can procure a perfect cure in at most a month. In conclusion allow me to give you brief notes of three cases. One, my first case, that of my own child; the last two within the last three months.

F. W. C. attacked with a harsh cough January 26, 1879. On February 2, the true character of the disease was manifest, the following day the paroxysms were intense and frequent. Feb. 4. Got his first dose of quinine at 9 a.m. During the following night the paroxysms were less numerous and decidedly less severe. Feb. 6. Passed an excellent night, although he coughed several times. From this to February 27, he steadily improved, and by the first of March was quite convalescent.

On the 14th of May this year I was asked to see three children in the family of Mr. W. O., who all had had whooping cough, well marked, for a week. From the description given by the mother, on my visit, they were all rather severe cases. The disease had been contracted from the child of their next door neighbor, who had already had it for over a month, and the doctor of this child was treating it on the "do nothing plan." I placed them on quinine, and within 48 hours the relief in the words of the mother was "wonderful." On the 1st of the present month of August, I was asked to visit at St. Johns, 26 miles from Montreal, a little girl 8 years old, the child of Capt. D., formerly of the Royal Canadian Rifles. She had had whooping cough since the middle of July, and had wasted to almost a shadow. The mother described the paroxysms as "frightful." They occurred every couple of hours during the day, and at night were so incessant, that for at least two weeks the child had positively hardly got any sleep. I ordered her one grain of quinine every two hours. On the 7th of August, there being no perceptible improvement, I was again requested to see her. They begged me to give her something else, something that would relieve her, at once, for they thought she could not live many days if the paroxysms continued as they had been. The child certainly was the worst wreck from whooping cough I had ever seen. My faith in quinine was however firm. I therefore simply doubled the dose of quinine, giving her 2 grains every 2 hours during the day, and at least twice during the night. On the 12th of August I again saw her, and the report then was, the first dose of the stronger medicine showed a beneficial result, in a slight dimunition in the intensity of the paroxysm. On the night of the 11th of August, the child went to bed at 7 o'clock and slept without waking and without a paroxysm till 5 a.m., when she had had a slight one. I saw her at 6 p.m., and during the day she had had only three slight attacks since 5 a.m. The effect of the medicine was in the words of the mother "wonderful." As might be anticipated from the quantity of the drug taken, the child complained of some headache, and slight noise in the ears. I ordered the medicine to be continued at intervals of 4 hours. In some, in fact in most cases, difficulty is experienced in getting the child to take the medicine. If the child is young, I simply insist upon the medicine being given forcibly and although at first this is done reluctantly by the mother, she so soon sees the resulting benefit to the child, that she willingly perseveres; when the child is old enough to realize the benefit it is receiving, I do not unfrequently find them ask for the bitter medicine.

So little is found in works on practice concerning this method of treating whooping cough, that I felt the meeting of our Dominion Association was a good place to direct the attention of the profession to it. In conclusion, I may say that within a year or two, the last being in the Philadelphia Medical Reporter of the 31st of July, several short papers have appeared advising the injection of quinine in solution by means of an ordinary syringe against the posterior wall of the pharynx. A Dr. Kohtonetz in the *Deutsch Med. Zeitung* of June 17th, 1886, advises the following solution to be used in this way or in the form of spray, for a child 3 or 4 years old.

℞ Quinine Sulphates	gr. lxiv.
Acid Sulphuric	gtt. xxxii.
Aquæ destillated	℥ vi.

I see no advantage in its being employed in this way, and its application in this manner is certainly attended with even much greater difficulty than giving it in solution in the ordinary way.

CLINICAL LECTURE.

Delivered at the Montreal General Hospital, March 2nd, 1886.

By Francis W. Campbell, A.M., M.D., L.R.C.P.L. Dean of and Professor of the Theory and Practice of Medicine in the Medical Faculty of Bishop's College.

SCIATICA.

The patient now before you, gentlemen, came to the out-door room about five days ago, in much the same condition as you see him now. Body slightly flexed on the thigh, and the leg upon the thigh, and complained of severe pain, in the lumbar muscles and especially along the course of the sciatic nerve. He was ordered five grains of iodide of potash thrice daily, and directed to return yesterday. This he did, and I had his case taken for me by Mr. Vidal. His name is Patrick O'Connor, and his age 47. In his family history we do not find any heriditary tendency to any particular disease. He has been in Canada for thirty six years, and has always worked as a laborer —being much exposed to extremes of heat and cold—but he has never specially worked with wet feet. His health has been uniformly good, until

his present attack, which came on five weeks ago, quite suddenly. He went to bed in apparent health, and awoke during the night with a violent shooting pain; partly in the small of his back, but most violent over the right sacro-ischiatic notch (from which emerges the sciatic nerve), and extending down the posterior, and outer part of the right thigh. He tried several household remedies, but without success, and for three weeks he informs me, he has neither gone to bed, or taken his clothes off. This is because the pain is considerably aggravated upon his lying down. He also complains of some loss of sensation in the leg, and on testing this point yesterday I concluded that to a certain extent sensation was dulled. He says the leg feels numb and heavy and has a feeling of stiffness. The pain, although constant, has paroxysm of intensity, when it is of a lancinating or tearing character, and in these paroxysms changes its position frequently. Yesterday I gave him Potash Iodide ʒ ii. Pot. Bi. C. ʒ iv. Vin. Colchci. ʒ iv. Aquæ ʒ vi. ʒ ij. ter in die. The conclusion I have come to is that this patient is suffering now from a form of sciatica; although at first it seems to have been accompanied by decided lumbago. This, however, is not an unusual occurrence, very often an attack of lumbago preceeds the sciatica, and the pain gradually works its way till it settles in the sciatic nerve. The disease is a neurosis—but constitutional predisposition has less to do with it than with any other form. It is caused by cold and dampness, to sitting on anything that compresses the nerve—excessive walking, and constipation. The sufferings in this disease are sometimes very great and it is very rebellious to treatment.

Treatment. If the cause is known it must be removed. Constipation will require active purgation. In cases where the attack has commenced with lumbago, the Turkish bath is especially useful. The hypodermic injection of morphine 1-6 to ¼ of a grain with the 1-120 to the 1-100 of solution of atropia has been found very serviceable. The deep injection in chronic cases of five to ten minums of chloroform is highly spoken of. The needle should be inserted, where the pain is most severe. Ether may be used but is less effective. Galvanism is advised, apply one electrode near the exit of the nerve from the pelvis and the other below. A powerful current must be used. The application of the hot hammer or button is often very successful. Blisters along course of the nerve and the raw surface dressed with morphia. The warm pack is advised. It should be worn all night. In chronic cases with a rheumatic history iodide of potash, guiacum and turpentine should be given. [This patient made a rapid recovery and was subsequently presented to the class.]

Correspondence.

LETTER FROM BERLIN.

Editors CANADA MEDICAL RECORD.

SIRS.—The University of Berlin still controls the teaching of medicine in that city, although special hospitals and specialists have arisen from whom the student may derive valuable additions to his knowledge.

With these occasional exceptions, however, the professors in the University and their assistants form the principal means by which the hospital advantages of the German Capital are made available. There are accordingly few courses which the student of medicine or surgery does not take as a *bona fide* matriculant of the University, and if he wishes to be properly accredited it is the usual course to pursue. He will attend the regular professional lectures and the subsidiary classes of the assistants in whatever branch or branches he may decide to learn. And the first thing that will strike him will be the difficulty of getting precise information regarding the men and things he will be the most curious about. The German student probably knows as much as the English or American, but he concentrates it upon one or two objects. He knows, for example, a great deal about methods in surgery, but he is ignorant about the hour at which Leyden lectures on medicine or whether Henoch discourses about children on Wednesdays or Saturdays. It may seem a trivial matter, but there appears to be no central office of enquiry, no notices in a porter's lodge—no reliable indication of the time, place and immediate whereabouts of the various lectures, demonstrations, etc., whereby a stranger may regulate his search for information in medical Berlin. Nor is there much use in enquiring of the students that are everywhere to be found about the hospitals and University buildings. They would doubtless tell you, with their proverbial politeness, if they knew, but the truth is they simply don't know. Fortunately few Americans will visit Berlin without finding a sufficiently communicative soul in some fellow-

student of his own country, but in any event I would advise everyone who thinks of visiting the city to take with him that useful book "Berlin as a Medical Centre;" and, although I was informed by a native Berlin bookseller (who will shortly publish a similar work of his own), that Dr. Bigelow's book is "full of errors," yet much time and labor will be saved by the perusal of some such guide. Most of the German professors and their assistants speak English, but I would strongly urge upon students visiting Germany the necessity of learning enough German before leaving home to enable them to carry on ordinary conversation and to read the language fairly well. Having made this advance the visit will be infinitely more profitable and satisfactory than if he knows nothing of the language.

In pleasing contrast with the hospitals and schools of instruction of London and other medical centres, the visitor will not be obliged to spend such a large share of his time in going from one place to another widely separated from it. The methods of transit are also convenient, clean and rapid, a very noted difference from those of the English metropolis. As I mentioned in my letter from London, it is a hardship and a great loss of time to have to transport oneself from, say, Mr. Treves' Clinic at the London Hospital, in the east end of the city, some five miles to listen to a teacher, or to see an operation in the Soho Square Hospital, or shortly afterwards to make a pilgrimage to Guy's or St. Thomas'. With, perhaps, the exception of Koch's department (the Hygienishe Institut in the Klosterstrasse), the buildings of medical interest are all within a few minutes walk of the *Charité*, the great hospital of some 1,500 beds, where all the medical and many surgical cases are treated.

The medical visitor to Berlin, be he transient or otherwise, should have his head-quarters near this extensive collection of buildings. He will find that he must rise early, if he wishes to make the most of his time, because several lectures and demonstrations begin as early as seven o'clock; at eight o'clock everything is in full swing, and by two p.m. the *dies medicus* is far spent. The origin of this early rising I could not trace, but I think it is preferable to our later hours. How the careless, beer-drinking and café-loving German feels like rising with the lark I cannot understand. Certain it is that he spends little time over his breakfast, that shadowy repast composed of a cup of coffee, rolls and butter, and is on hand while the English student would be debating the momentous question; "to rise or not to rise?"

The major portion of American visitors to the German capital will like to see and hear all the men whose names are equally well-known in America as in their own land. Now, as ten years ago, Virchow is still the most prominent figure—*primus inter pares*—in the University group, and one looks with some wonder at the enthusiastic old (and yet, as far as energy and vivacity are concerned, one of the youngest) gentleman whose lectures on pathology still attract pupils from all parts of the world.

I would strongly advise the visitors to Berlin to make an early start and see how students are taught to make *post mortems* at the *Charité*. The supply of material, as one might expect from a hospital of this size, is practically unlimited, and it is judiciously utilized. Two of Virchow's assistants are almost constantly in attendance, and the student is taught practical pathology as he is instructed in practical anatomy in our dissecting rooms.

It will be seen at once the very great advantage in the way of teaching possessed by a concentration of material, such as we find in the *Charité*, over the scattered hospital system prevalent in London, New York and other medical centres. See the number and variety of illustrations possible in the lectures of Prof. Virchow, for example. He can draw not only from the *Charité*, but from any or all of the clinics connected with the University, and the result is that one of his lectures which I heard him deliver upon that comparatively rare disease—trichinosis—was profusely illustrated both by fresh and microscopical sections and preparations from patients lately dead in the hospital. So, too, with all the clinics, surgical and medical. The plan of centralization, doubtless a part of that military system which everywhere obtrudes itself upon the stranger, whatever disadvantages it may have for the patient, and however unsuitable to England and Canada, will commend itself to him who has tried both plans.

Schroeder's quarters are the *Universitat Frauen Klinik*, a beautiful modern building of brick—and they are well worth a visit. I suspect that the female patients are treated something after the *vile corpus* style of our forefathers. Prof. Schroeder gave a very lucid and well delivered lecture upon dislocations of the uterus, taking for his text a patient upon the table. The woman was examined in turn by some half dozen students called from the auditorium

and then each was questioned by the lecturer. A very good thing for the students doubtless, but it struck me as being unjustifiable to keep a patient under chloroform for an hour just to demonstrate the existence of a uterine retroflexion to a class of students.

The anæsthetic preferred here is almost universally chloroform or a mixture of chloroform and ether, or of ether, chloroform and alcohol in varying proportions.

The apparatus for administration is usually an extremely simple one, and I must say that I saw, during the short time I was able to give to operative performances,no ill or even disagreeable results from its administration.

Those who are interested in chemistry or in its applications to pharmacology and other departments of scientific medicine should not forget that the veteran teacher and scientist, the renowned Hofmann, still lectures and carries on original work with his old-time fire and enthusiasm at the chemical laboratory, No. 35 Georgen Strasse. His laboratory is well worth a visit, as a place where much of the world's knowledge of chemistry in all its important branches has been, is, and will probably long continue to be acquired. Those who are interested in operative surgery will find in Bergmanns Klinik enough to satisfy the most exacting. I may be forgiven the expression when I say that every stranger feels as if he were in a human slaughter-house when he has been half an hour in the professor's large and handsome operating theatre. I have myself seen on its floor at one time as many as five patients in the different stages of primary chloroformization, operation, and having their surgical wounds dressed by assistants, or of having some minor detail of an operation attended to by the first or second assistant. Again,one sometimes gets the impression that here the male patients, too, are treated as material "*in a pathological condition*." I do not wish it to be supposed that there is any evidence of carelessness ; indeed I have every reason to think that the results are quite equal to those obtained in our best English hospitals. Some form of antiseptic treatment is believed in and is universally employed. The antiseptic in which most faith is reposed is mercuric chloride with iodoform as an adjunct and carbolic acid for immersion of instruments. I might add here that Leiter of Vienna manufactures blunt instruments (forceps, for example) covered with vulcanite, so that they can be immersed in the corrosive solution without injury.

I heard Henoch (a comparatively young man) give one of these lectures on children for which he is famous. The subject was *trismus neonatorum*, a very uncommon affection with us, and yet there seemed to be no trouble in getting subjects from the *Charité*.

Of all the members of the Berlin Medical Faculty the weakest lecturer is Koch. He may be described as a young man with a rapid, uncultivated delivery, doomed to lecture on a subject notoriously unpopular with students—hygiene—and yet the hygienic institute has a museum better fitted up for teaching purposes, as far as I know, than any other in the world. The models of life-saving and accident preventing appliances for workshops and factories alone fill three large rooms, and the taking of his class through them and explaining all these varied apparatus would be more likely to teach them the value and scope of a knowledge of sanitary science than all the learned but somniferous lectures he could deliver. Quite different is it with his world renowned laboratory, where the study of bacteriology is pursued. Here the cultivation of micro organisms and the study of their behavior under various influences are carried on by the aid of his assistants and as many students as can be accommodated. The work in this new department is one of the most important that can occupy the attention of the scientific student, and there is no place in the world where it can be more thoroughly and more satisfactorily performed than here.

In the department of medicine Leyden is perhaps the best man to listen to, and I would advise anyone interested in ophthalology to attend the Augen Klinik of Prof. Schweigger. I fear that I shall no longer be able to meet that popular superstition —that the eye can be turned out upon the cheek, suffer some operative interference and then be returned to its normal position in the orbit—with a stern denial, because I have myself seen it done. Those who do not interest themselves in the reply to the question ; "what shall be done with a lost eye ?"—are perhaps not aware that optic neurotomy, followed by replacement of the ball, is one of the plans devised to prevent the dangers of sympathetic ophthalmia in the sound eye, and the inconvenience of a glass eye after the useless organ has been removed. The internal rectus is severed, the conjunctive cut through sufficiently to allow of the division of the optic nerve close to the fora-

men, the globe is turned out, the nerve a second time cut flush with the eye ball, and the latter returned to its place. The divided muscle is sutured, the conjunctival wound sewed up, the palpebra stitched together, and, if the operation is a success, the patient is eventually able to command movements in the sightless globe just as formerly.

This by no means completes the list of the Faculty, but it comprises nearly all those whom I was able to see and hear with my own eyes and ears, and that, as I promised you, is all I shall speak about. The other members of the Faculty, most of whom have their lecture rooms in the *Charité* can be heard and seen during the session, and their names will of course occur to the reader of these notes, but owing to the lectures and demonstrations taking place in some Kliniks at the same hour it is extremely difficult to see every one in a comparatively short time.

The absence of any adequate inspection of meat at *our* public abbattoirs, and the crying necessity for it, render doubly interesting a visit which I paid to the Central Viehof in Berlin, where things are conducted in a style and upon a scale worthy of a civilized people. Here all (or nearly all) the meat sold for food in Berlin and the surrounding country undergoes a strict macro—and microscopical examination by competent veterinary surgeons. That the inspection of food may be carried on with as little inconvenience and loss as possible the wholesale markets are situated in the Viehof grounds and half the market value of animals condemned by the inspectors is paid the owner by the Government. The loss of the other half will doubtless have a salutory effect upon that too large class of careless, ignorant and wilfully culpable stock raisers and butchers who expose for sale diseased animals. Every animal destined for the market is examined before and after death. Having passed the first examination and been killed the meat is now carefully examined a second time, and divided as to quality into first, second and third class. Suspected portions are put aside to be subsequently examined by competent microscopists. *Every hog is microscopically examined*, peices being taken from the ham, neck and the central tendon of the diaphragm, the commonest seats of the trichinia. Of course to make this examination thorough and valuable a large staff is requisite. In the inspection department there are about 25 veterinary surgeons, 100 microscopists and sub-inspectors, and the supervising pathologist, whose decision in cases of doubt is final. We were shown a large number of samples of diseased meat, and came away feeling that the man who eats uninspected meat often eats "trash," and that it is safer in countries like the Province of Quebec to be strictly vegetarian in one's habits. This is a subject upon which the veterinary and medical profession might well join hands, and I am sure the medical man who follows the courses of the magnificent Thierartznei Schule will see what advances the veterinary art has made in Germany. I met many Canadian students in Berlin and to several of them, taking special University courses, I am deeply indebted for acting as my cicerones while in the pursuit of information relative to things medical in Berlin. Dr. J. J. Gardner is steadfastly pursuing his study of ophthalmology; Dr. Ruttan in Hoffman's laboratory; Dr. McConnell studies the doings of micro-organisms in Prof. Koch's laboratory, while Mr. Clements, well known in Montreal, is a student of veterinary medicine and surgery in the fine school I have just referred to.

My next letter, I hope, will be written in or at least about Vienna.

C. A. W.

BERLIN, July 12, 1886.

A VISIT TO PASTEUR'S INSTITUTE, PARIS.

Editors MEDICAL RECORD.

The universal interest which at the present time attaches to the methods discovered by Mr. Pasteur, and now practised by his institute in Paris, for preventing the development of hydrophobia, makes a visit to his institution a great privilege, and one not less gratifying, than that of seeing the work done in the excellent hospitals of Paris or viewing the magnificent architecture of its public buildings and the profuse evidence of the sculptors' skill in their ornamentations and in the numerous statues, arch de triomphe and columns; or its unrivalled art galleries, palaces, boulevards, and opera house. I learned from Dr. Rodier, who is the Canadian representative there, that, owing to the number of patients coming for treatment, new and larger apartments had been opened a day or two before, on Rue Vacquelin. We proceeded there in the morning.

"The inoculations take place at 11 a.m. About one hundred are now inoculated daily. The crowd of men, women and children in the waiting-room represented various nationalities, as

evidenced by their costumes, appearance and conversation. Many of them had their limbs bandaged and their arms in slings. Several Russions were there who had been bitten by mad wolves. M. Pasteur was to be seen walking around among the patients and conversing with them freely. He dresses very plainly, and wears a smoking cap; he is below medium height, and appears about 65 years of age; he is partially paralyzed on one side and walks with a limp. His demeanor is humble and unassuming, but in his countenance is seen intense earnestness, together with an anxious expression, and all his thoughts seem concentrated, and at all times, on the great problems in connection with *disease germs*, or *bacteria*, and at the present time more especially with those of diptheria and hydrophobia.

"Each patient has a number, and they are called into the operating room in rotation. The inoculation is made with a hypodermic needle in the side. The virus is prepared by mingling with broth a portion of the spinal cord of a rabbit which has died of hydrophobia, and from a half to one cubic centimetre is injected beneath the skin, according to the age of the patient. Each of the eight assistants has his separate duty in the various processes. The injections are made by Dr. Crancher. The operation in most of the cases did not seem to produce any pain, although some of the children cried lustily.

"Each patient is inoculated once daily for ten days. If they are too severely injured to come to the operating room they are placed in the hospital, and the inoculation given there.

"The next day we visited the laboratory on Rue d'Ulin. Shortly after entering the gate, near the porter's lodge, we met the eminent scientist coming from the Ecole Normale, where I received an introduction. On the way to the laboratory he made inquiries regarding the recent smallpox epidemic in Montreal, wondering at the great mortality. When informed that the deaths occurred almost altogether among those who had opposed or neglected vaccination, he was astounded that such opposition could exist, and exclaimed, *Est il possible? c'est terrible!*' Recognizing the fact that to oppose vaccination meant ignorance of the absolute protection afforded by it, he seemed indignant that the anti-vaccinationists should be allowed thus to influence the people, and suggested that they be more fully instructed as to its benefit.

"Coming to the laboratory we observed a notice at the door, stating that visitors to obtain admission must persent letters from the consuls of their respective countries. M. Pasteur brought us up to the portions of the laboratory where his assistants were working, and they gave us full explanation of the methods of preparing the material for inoculation. We saw there physicians from all parts of the world, studying Pasteur's methods.

"The virus of hydrophobia resides chiefly in the brain, spinal cord and nerves. And it was found by M. Pasteur that animals inoculated direct in the brain developed the disease in a shorter time than if inoculated beneath the skin. He found, also, that by successively inoculating monkeys. one from the other, that the power of the virus decreased, and if rabbits were used it increased in virulence, and the period of inoculation became in a corresponding degree shorter, until after a great number of transfers, extending over several years, it was reduced to seven days. It was ascertained, also, that by drying the virus it became gradually attenuated, or at least produced a milder affection (he believes the result to be due rather to a lessening of the amount of the active principle than to diminished virulence) so that, at will, inoculation material of different degrees of virulence could be prepared.

"Four rabbits are inoculated daily in the vascular surface of the brain. They are secured to a board and chloroform given, the top of the head is shaved and a slit made in the scalp, a circular portion of the cranium, about ½ inch in diameter is removed by a trephine, which is worked by a crank, with cogged wheels, it is so graduated that when pressed firmly down upon the skull it cuts through the bony part only leaving the membranes intact. The piece is lifted out with a tenaculum. The inoculating material is inected beneath the dura mater by means of a hypodermic syringe with a needle bent at right angles. The wound is then cleansed with a solution of carbolic acid applied with antiseptic blotting paper, and the scalp wound closed with sutures. They are then placed in cages, long rows of which may be seen on tables in the lowest flat of the laboratory. They invariably die on or about the tenth day, and in the cages one can observe at any one time the different stages of the disease as it affects rabbits. The wound heals in a couple of days and the rabbit appears well until from the 4th to the 6th day when paralysis gradually set, in.

They stop feeding and lie stretched out on their sides in the cage, becoming emaciated until paralysis is complete. A portion of the spinal cord of those dying on the tenth day is used to inoculate fresh rabbits, and other portions are hung in jars containing potash or other dessicating chemical material. After being in these jars for ten days, it becomes very much attenuated, and is used for the first inoculation of the patients; and each day a solution made from a piece of spinal cord mixed with broth and of increasing virulence is employed, that which remained in the drying jars for 9 days is used for the 2nd injection, that of 8 days for the 3rd and so on until the tenth day the strongest virus is used. Then the person or animal becomes insusceptible to the action of the most rapid virus."

M. Pasteur stated that he had not yet been able to discover the *germ* of hydrophobia, but believed he would yet succeed in isolating it. He spoke of the impracticability of his methods, seeing that the process was so complicated and required specialists to propagate the virus and to be in constant attendance. In order to maintain a uniform standard in the degree of virulence of the inoculation material, experiments on animals have to be made constantly. He though, that in the great centres of each country a laboratory maintained by the Government should be established, and funds be raised, either by subscription or by public grant, to send, by rail or otherwise those who could not afford the expenses of travelling to these centres as soon as it is ascertained that they have been bitten by a rabid animal.

Before allowing any patients to be inoculated Pasteur makes full enquiries, through local physicians, and veterinary surgeons, as to whether they have really been bitten by a rabid animal or not, requiring the patient also to bring certificates from them. If the evidence is only partial that such has been its case he allows the patient the benefit of the doubt. The patients do not seem to suffer anything from the operations, appearing to be in perfect health.

The system will doubtless be improved upon after further investigation, but I have no doubt of its effectiveness even as at present practised. Rabbits or dogs receiving the ten inoculations are quite insusceptible to the infection from animals dying of genuine hydrophobia, and this test, is I was told, applied to one or two of the rabbits which are daily inoculated in the laboratory. Over a thousand cases have already been treated, and of these only seven succumbed to the disease, not including the Russians (8) who died from the bites of rabid wolves. France is recognizing the honour Pasteur has conferred by his great cleverness, by the efforts now being made to establish a permanent Institution on a larger scale. The Municipal Council of Paris has granted 2500 mitres of land on Rue Vacquelin as a site, and national, municipal and private subscriptions, as well as donations from foreign governments, are pouring in to be dovoted to the erection of this Institute. For the purpose of establishing a laboratory at any point, a rabbit is inoculated at M. Pasteur's laboratory. As animals will hve ten days there is time to reach distant countries, when healthy rabbits are inoculated. The process must be repeated daily in order to propagate and have in constant readiness a continuous supply of the proper degree of virulence.

J. B. McC.

Progress of Science.

INGLUVIN.

A very learned name for a remedy is Ingluvin. It is the essential principle of the gizzard, and bears the same relation to poultry that pepsin does to the higher animals. The honor of its discovery and utilization, in its crude state, remotely dates with the Chinese gastronomer, as well as to the Caucasian chemist, in its refined condition. From time immemorial the inhabitants of the Celestial Empire have used the gizzard of chickens and ducks in nearly all made dishes. Their writers have recommended the practice as a sovereign treatment of dyspepsia, weak stomach and vomiting. A favorite prescription of Chinese physicians for chronic indigestion is to cut up and digest chicken gizzards in hot water until they are reduced to a pulp, and then add some spices. A tablespoonful or two of the resulting paste is taken at each meal until the patient has entirely recovered. From China the practice passed to other parts of Asia, and was adopted here and there among the Mediterranean people. Strange to say it was never learned by the great nations of Europe until the latter part of the present century. On the other hand, the organic chemists of Europe discovered, about 1850, a powerful nitrogenous radical in the gizzard. Experiments thereafter showed it to possess many of the qualities of pepsin. These experiments led to its isolation. Numberless experiments have proven it to be a very valuable addition to therapeutics. Where pepsin refuses to act, and where, in severe cases, it has even been rejected by the stomach, Ingluvin effected relief rapidly and with the greatest ease.

In four recent cases of poisoning by root beer (Brooklyn, June, 1886), Doctor George Everson, jr., a well known physician of that city, reports that after pepsin and all similar compounds had been rejected by the stomachs of his patients, Ingluvin stayed the retching and enabled them to retain and digest food.

Dr. Lassing reports a similiar experience in several cases of acute dyspepsia.

A priori, it would seem as if Ingluvin should be more efficient and potent than pepsin in many cases of physical disorder.

Our poultry are chiefly granivores, and have no beak nor other buccal apparatus for crushing the hard grain and seeds on which they so largely feed. The food is swallowed when apprehended, and passes directly into the crop or gizzard. This seems to act both mechanically and chemically. Its interior walls are covered by a dense, hard cuticulous membrane, surrounded by muscles of the most powerful type. Along with the food is always a small amount of sand and gravel. The organ acts apparently by bruising and cracking, rather, than is commonly believed, by trituration. The motion of the ingluvial muscles is accompanied by a slow but continuous exudation, from the walls of the crop, of a strong organic fluid, of which Ingluvin in the chief constituent. The hull of the grain or the shell of the seed is broken by the pressure of the walls and the gravel, and their interior is exposed to the chemical action of the Ingluvin. By the time it reaches the stomach it is ready for the gastric juices. From this point on, digestion proceeds as with the higher animals. As the gallinaceæ have very small salivary glands, and as the fluids secreted by these resemble the secretion of the parotid rather than that of the sublingual and submaxillary glands of the human being, it would seem as if Ingluvin played a double part, exercising the functions of the ptyalin of the saliva as well as the pepsin of the stomach. Ingluvin is prepared by the farseeing chemists, Wm. R. Warner & Co., of Philadelphia. It is made from selected gizzards, and is so carefully extracted as to be free from all foreign organic bodies. It is already known and appreciated by the medical profession. The American Analyst bespeaks for it the same appreciation by its readers. We extract the following:

Prof. Roberts Bartholow, M.A., M.D., LL. D., in his late work on "Materia Medica and Therapeutics," says:—Ingluvin. This is a preparation from the gizzard of the domestic chicken—*ventriculus callosus gallinaceus*. Dose, gr. v.—ʒ j.

Ingluvin has the remarkable property of arresting certain kinds of vomiting—notably the *vomiting of pregnancy*. It is a stomachic tonic and relieves *indigestion*, *flatulence* and *dyspepsia*.

The author's experience is confirmatory of the statements which have been put forth regarding the exceptional power of this agent to arrest the vomiting of pregnancy. It can be administered in inflammatory conditions of the mucous membrane, as it has no irritant effect. Under ordinary circumstances, and when the object of its administration is to promote the digestive function, it should be administrated after meals. When the object is to arrest the vomiting of pregnancy, it should be given before meals.—*From the American Analyst, August 1st*, 1886.

REMARKS ON INCONTINENCE OF URINE IN CHILDREN.

By William H. Day, M.D.
Physician to the Samaritan Hospital for Diseases of Women and Children.

There is scarcely any disease occurring among children more annoying and troublesome than incontinence of urine. It is particularly vexatious to parents, and is often regarded by them as an incurable infirmity. After their patience has been long tried, they abandon one remedy after another, and look forward to puberty, when, they are told, the disease may depart never to return. Failure in treatment is frequently owing (1) to an erroneous diagnosis of the cause of the affection; (2) to the inefficiency with which the treatment is carried on; (3) to its being discontinued too soon; hence, in hospital practice, where patients can be watched, we meet with better results than in private practice.

Among the causes of enuresis, the following may be enumerated: If the urine be excessively acid, or loaded with urates, the bladder becomes overstimulated and readily discharges its contents. If the bowels be habitually costive, or there be worms in the intestines, vesical irritation may ensue; or, if the child be guilty of masturbation, there will be no chance of cure till the habit is corrected. Weakness of the muscular coat of the bladder from general debility or anemia is a very common cause; the bladder, not being able to tolerate any quantity of urine, readily excites the motor apparatus. I have known a troublesome case follow typhoid in a boy, ten years of age. If the disease be owing to a long prepuce, causing phimosis, it should be removed. Sometimes no cause can be ascertained. Children, two or three years of age, frequently wet the bed either from laziness or from lack of control over the bladder. It is important to remember that, even though the secretions are in perfect order, the incontinence may continue, and thus a habit may be formed which the poorer classes and stern people occasionally endeavor to correct by punishment. In some idle and dirty children such a course may be of benefit, but in others, who are nervous and timid, there is the possibility of increasing the evil we desire to remove. I make no allusion to those cases of enuresis associated with diseases of the bladder or brain.

Enuresis is sometimes seen in connection with chronic albuminuria, and is occasionally so persistent as to require special treatment. The following is a good illustration:

Case I.—G. M., aged nine, was sent to me from the country, April 4, 1885. His bed was wet both

night and day. Before he was six years of age he had measles and whooping-cough; then, after a short interval, scarlet fever, followed by dropsy. A year after his recovery from the dropsy he could only pass his urine in drops. "He would stand up and cry, and say he wanted, and could not." He suffered in this way for two months, and then he would pass urine every ten minutes, but without pain. Some time before he left his home in the country he was tested for stone in the bladder, as he frequently had pain, and blood was occasionally present in the urine. The urine, on admission into the hospital, was highly albuminous (one-tenth part), of specific gravity 1020, pale, cloudy, and of acid reaction. A few casts were seen under the microscope. There was no fever, nor cardiac disturbance. He was confined to bed, and, as he had pain across the lumbar region, he lay during a part of the day on his abdomen, to lessen local congestion. He was ordered a milk diet, and a mixture of belladonna, nux vomica, and tincture of perchloride of iron three times a day. Four days after admission, he ceased to wet himself in the daytime, and on the 10th, 11th, and 12th he was dry at night. The bowels were kept open, and the albumen diminished. On the 30th, it was reported that he had not wetted the bed since the 14th. He passed a much less quantity of urine, but it was still albuminous. He went home, after staying in the hospital for six weeks, wonderfully relieved, his urine only containing a trace of albumen, and no blood-corpuscles. In November, I heard that the frequency in micturition had returned, that he was worse in cold weather, and that the urine was very albuminous. I have mentioned this case merely to show that the treatment, which mainly consisted in a milk-diet and attention to hygienic conditions, had for a time a very salutary effect.

Case II.—E. F., aged seven, was admitted into the Samaritan Hospital under my care November 3, 1884. The patient was a twin, highly nervous and excitable, with mitral disease, probably congenital. She never had scarlet fever or rheumatic fever. She first began to ail fifteen months before admission, wanting to pass urine frequently. She wetted the bed every night; the urine was pale, copious, and contained phosphates, specific gravity 1020, acid. A solution of nitrate of silver was applied to the neck of the bladder (two scruples to one ounce), and for a few days it seemed to be of benefit. A mixture of tincture of belladonna and tincture of perchloride of iron was ordered three times a day, but no good result followed, and on December 1st I began to employ Stohrer's smallest induction apparatus (interrupted current) with one closed cell, for ten minutes daily, one sponge being placed over the sacrum, and the other over the pubes. An improvement almost immediately set in, and the patient left the hospital cured on January 10, 1885. She was readmitted into hospital on September 30, 1885, suffering from general debility and pain over the cardiac region, but she had no return of the enuresis while she remained in the hospital for six weeks. This is the second case I have recently seen associated with heart-disease.

Case III.—G. R., aged seven, was admitted into the Samaritan Hospital under my care November 27, 1884. For upwards of eighteen months he had wetted the bed at night, and frequently during the day. The mother fancied that he had been tampered with by some boys of his own age. The urine was very pale, of acid reaction, and contained a few phosphates. He was ordered a milk-diet, and meat, once a day. Faradization was used daily for ten minutes. He took a mixture of tincture of belladonna and tincture of perchloride of iron three times a day, and left the hospital cured on January 9th, having wetted his bed only five times since his admission, and some of these nights very slightly.

Case IV.—A. H., aged eight, a pale and irritable boy, was born in South America, a healthy baby. He had incontinence of urine from birth. When brought to me on December 13, 1884, he wetted himself both night and day, and was invariably wet after being in bed ten minutes. He passed large quantities of high-colored offensive urine, containing much uric acid. When the urine had become normal, he was ordered tincture of belladonna, and tincture of perchloride of iron, in five-minim doses three times a day. On January 12th, the appetite had improved, but the enuresis was the same. Stohrer's apparatus was now used for ten minutes daily, the sponges being placed over the sacrum and pubes. The iron and belladonna mixture was continued. On the 18th of February the report states that he had passed several nights without wetting his bed; but, as the urine contained phosphates, and the boy seemed very weak, he was ordered ten minims of dilute phosphoric acid, with two minims of liquor strychnia, three times a day. On March the 9th, the urine being normal, fifteen minims of the tincture of belladonna were given twice a day. The use of the battery was discontinued. From the 17th to the 21st, he was not wet at night, but was wet on the nights of the 22nd, 23rd, 25th, 26th, 27th, 30th, and 31st. From April 1st to the 12th, the bed was dry at night; on the 13th it was slightly wet, and, therefore, the tincture of belladonna was increased to forty-five minims daily. He invariably awoke to pass urine, whereas formerly he wetted the bed without knowing it. On April 19th, he went to Brighton, and stayed a month there. He had a sea-bath morning and evening, and was out the greater part of the day. For seventeen consecutive nights he did not wet the bed. During this time he took two drachms of the belladonna mixture twice a day, being equal to one drachm of the tincture daily. The use of battery was discontinued. It was noticed that his pupils became very large, and when he attempted to read he saw a mist before his eyes. On September 1st, it was reported that he had perfect control over his bladder in the day time, and had not wet

the bed oftener than once a week, and then but slightly. He has had no return up to the present date, January 25, 1886.

CASE V.—A young lady, aged nine, was brought to me by her mother in September, 1885, suffering from enuresis of nearly a year's duration. All treatment had failed to relieve her. The use of the battery was ordered every night for ten minutes, and a mixture of belladonna and iron three times a day. These measures were continued for six weeks when the patient was well, and she so remained for three weeks afterwards, when the symptoms returned slightly, "but not nearly in the same degree." The battery got out of order, and, the patient living in a remote Irish district, there was a difficulty in getting it repaired. If the use of the battery be resumed regularly, the cure will be complete.

REMARKS.—It seems impossible to lay down a plan of treatment for general adoption; the peculiarities of constitution and habits of life must be taken into consideration, and haphazard treatment guarded against. The cases recorded were cured or relieved by the combined influence of electricity, iron, belladonna. Cases two and three are good examples of the utility of faradization. Case four is a very important one; the symptoms dated from birth, and resisted various methods of treatment. The successful issue is in great measure attributable to the constant care which the mother took in feeding the child, and rigorously attending to my instructions. Those cases that date from birth or have lasted upwards of a year, are invariably intractable, and often incurable, especially if the child be of nervous parentage or delicate when born, or pass large quantities of urine. With respect to the utility of faradism there can be no question; it requires to be used regularly, and to be continued for a considerable time; but it sometimes fails altogether. When the nervous system is weak, and there is generally debility the sphincter loses its power, and urine escapes by night and day without the child's knowledge. It is in such cases as these that iron and nux vomica are of service.

If there be excess of muscular action, and the child have frequent inclination, and without power of control, belladonna is an admirable remedy. It occupies a prominent place as a therapeutic agent, and sometimes, when combined with iron even in small doses, it seems to do good; but it should not be given up in obstinate cases till either soreness of throat is produced or dilatation of the pupils takes place. In my hands it has often failed when administered in any form or dose. It certainly tends to lessen irritability of the bladder, and should always have a fair trial.

Cold sponging in the morning is very serviceable in cases of enuresis that appear to have their origin in general debility. It braces up the nervous system, and is a powerful tonic. The slight sensation of chilliness soon passes away, without leaving any depression, if vigorous friction with a towel be employed for a few minutes. In a case under my care about three years ago, the cure was attributed to this simple measure when one remedy after another had failed. The vital functions are brought into a healthier state, the skin acts better, and the appetite and digestion improve. However delicate a child may be, free sponging in tepid water, followed by a good rubbing, is of great value. The water may be used at a temperature of 90° at first, and as the child becomes stronger, may be lowered to 70°.

Now, a word as to diet. Milk is an important non-irritating article of food, and should be mainly relied upon in these cases; but the quantity given at one time should be restricted, especially on going to bed. Farinaceous puddings, containing eggs, are admissible. When the urine is turbid and acid, or the child is rheumatic, milk ought to take the place of nitrogenous food. A child under my care at the present time, with a "large white kidney," is troubled with frequency of micturition when allowed a little beef-tea, while when adhering to the milk she only passes urine twice, or at most three times in the twenty-four hours. In states marked by anemia and general debility, however, animal food is an essential article of diet. —*The British Medical Journal.*

CHRONIC CYSTITIS.

A paper read before the Academy of Medicine, March 29, 1886.

By P. S. CONNER, M.D.,
Professor of Anatomy and Clinical Surgery, Medical College of Ohio.

In a state of health the bladder admirably performs its physiological function, that of holding the gradually formed urine until such time as micturition may be convenient and proper. Neither in the viscus itself, its contained fluid, or the canal through which it is discharged, is there a source of irritation. But let there be a long continued altered state of the inflowing fluid, a tumor of the bladder wall, a retained foreign body in the cavity, or an obstacle to the ready outflow of the urine through the urethra, and, sooner or later, in greater or less degree, there will be developed a state of chronic inflammation with associated changes in the chemical constitution of the fluid. In any case, therefore, the diagnosis being established, before any method of treatment is instituted determination must, if possible, be made of the exciting cause; the removal of which, if ascertained and capable of being taken away, should be effected at the earliest moment. If the primary trouble is in the kidney therapeutic or operative measures must be adopted accordingly. If there is a foreign body in the bladder it must be extracted. If there is an urethral stricture it must be dilated, divulsed or divided. Such stricture makes trouble in two ways, by causing alterations in the urine, dammed back in the bladder, never completely evacuated, and as a result decomposing and becoming an active irri-

tant to the mucous membrane; and further by affecting the circulations in a bladder wall compelled to abnormal action because of the undue resistance that it has to overcome in forcing the stream through a more or less contracted, unyielding and inelastic tube. Because of the ready removal of the condition which produces the cystitis associated with stone or stricture, such cases of chronic inflammation of the bladder, if they have not existed so long as to have become complicated with lesions of the kidney, can be cured with comparative ease.

It stands to reason that if the inflammation is excited, maintained or aggravated by the irritant character of the urine, just in proportion as such is lessened will the morbid state be diminished; and this can be effected in no slight degree by increasing the amount of urine passing through the bladder. To such flushing of the cavity, distributing and carrying away the sedimentary mucus and pus, is due the favorable effects of the administration of large quantities of water, either any ordinary soft water or that obtained in a state of great purity from certain springs.

Some of the infusions owe a part at least of their reputations to the good effect of the cleansing of the bladder by the increased amount of urine passing through. For like reasons, washing out the bladder by injection acts beneficially, provided it is properly done, and with a suitable fluid. The instruments must be clean, in the fullest surgical sense of the word, the fluid warm and such as to arrest and prevent decomposition. Theoretically the weak sublimate solution is the best that can be employed, but practically it is found not infrequently to be badly borne, even when of strength of not more than one part in 6, 7 or 8,000. As good a solution as can be used is, in many cases, that of boracic acid of strength of 3 ss— 3 j to the pint of water. Care must always be taken not to throw in the fluid too rapidly or too strongly, and if a single current catheter is used not to over-distend the bladder.

In elderly men an existing cystitis, if neither stone nor stricture is present, almost always depends upon enlargement of the prostate, in a small proportion of cases confined to the third lobe. Such enlargement acts as a stricture does, producing the same condition of the urine and of the bladder wall. In the earlier stages and the milder degrees the indications for treatment are very clear. Systematically, at regular intervals, the bladder must be completely emptied, and that with the least possible effort to the patient—in other words, catheterization should be made and natural evacuation altogether suspended; suspended, not abandoned, for not infrequently after steady use of the catheter for many months or years patients may without resulting ill effects permanently lay aside the instrument. As a rule though, the subject of prostatic hypertrophy in amount sufficient to produce notable effects upon the bladder and the urine should make up his mind to uniformly employ the catheter during the rest of his lifetime; the soft instrument preferably, and always properly disinfected. In very many cases the chemical changes in the urine are due to bacteria, carried in on the catheter; and it is because of the germs thus introduced that the frequent use of the instrument has long been recognized as likely to be, if not certain to be, followed by putrefactive changes in the urine and an aggravation of the symptoms.

In the older and severer cases, when the general hypertrophy of the prostate is marked, the basfond of the bladder consequently deep, the residual urine in decided amount and alkaline in reaction, catheterization and antiseptic irrigation are the essentials of treatment; attention to which, together with due regulation of the general habits of life, will ordinarily keep the patient in a state of comparative comfort. Even when the muscular coat has been so enfeebled as to permit of over-distension and of long retention with its usually associated and resulting incontinence, the same method of treatment steadily maintained for months will, if there has not been too much damage done the kidney, produce marked improvement in the local and general state. But oftentimes the bladder, instead of being over tolerant, is excessively intolerant of fluid, the presence of a very moderate quantity of which is sufficient to excite a spasmodic painful, imperious desire to urinate. This condition may be associated with and dependent upon prostatic hypertrophy, very apt to be of the ball valve variety or complicated, as it often is, with urethral stricture, upon bladder tumor, or upon tubercular disease of the prostate or the seminal vesicles.

The intensity of the irritability of the bladder is many times markedly affected by the habits and mental state of the individual. In these cases the plan of treatment already indicated may be sufficient to so greatly lessen the severity of the symptoms as to render the patient unwilling to have anything else done. When there is decided difficulty in the introduction of the catheter, either because of the size and direction of the canal, or because of an over-sensitiveness of its lining membrane, permanent retention of the instrument has been advised. In my judgment such advice is not good, for even if a soft catheter is employed, (and it certainly is to be preferred) it will soon become encrusted, it will be almost certain to increase the irritation, and it will be very difficult if not impossible, to keep it aseptic. In many cases, indeed in the very ones in which a sonde a demeure would seem to be most indicated, no soft instrument can be introduced.

It is in these cases of severe character, and often of irritable nature, that operative interference is so strongly called for, and is capable of accomplishing so much. Open out the contracted urethra by sound or knife, and the pre-existing bladder inflammation will generally rapidly diminish, perhaps altogether disappear.

If there is prostatic enlargement what can be

done? Only a few years ago, comparatively, it was hoped that in parenchymatous injections of the enlarged gland we should find a means of producing shrinkage, but extended experience has proved its utter valuelessness. Prostatotomy and prostatectomy, either internal or external, have much to commend them. I am becoming more and more convinced that in all the severer forms of chronic cystitis in the male, either perineal section or suprapubic cystotomy should be made. By a comparatively slight operation, the opening of the membranous urethra, we may readily get at the prostate, recognize the position of, and so be able to remove by knife, punch or snare, a bar or ball obstructing the neck, and in the majority of instances be able with the finger to sweep a part or the whole of the mucous wall of the bladder, thus locating any tumor that may be present. Through such perineal opening any existing prostatic or vesical calculi may be removed. Further, and more importantly, thorough and complete drainage of the bladder may be secured, a full-sized tube being easily introduced, comfortably well borne, and readily removed; no such objections resting against its protracted use as we have seen lie against a permanently-retained catheter passed through the unopened urethra.

Experience has shown that the pressure of a drainage tube thus employed causes a dilatation of the neck and prostatic portion of the canal that may be expected to be permanent, and which will permit, after some weeks or months, of the removal of the tube and the allowing of healing of the wound. By drawing off the urine as fast as it comes into the bladder there is secured to that organ the rest which above all things else is the essential element in the treatment of any surgical affection. If the cystitis depends (as it probably does much oftener than is commonly supposed) upon a vesical tumor, the perineal operation permits of the determination of the location, size and nature of the neoplasm; of its removal, if practicable; and, under all circumstances, of the cleansing and draining of the cavity.

In those distressing cases, met with usually in young subjects, of cystitis dependent upon local tuberculous deposits, where the symptoms of stone are so strongly simulated, perineal section with dilatation of the prostatic urethra or division of the gland, gives more relief, and that more speedily, than anything else that can be done. Guyon and his followers of the French school urge that the opening into the bladder should be supra-pubic; and there are unquestionably advantages in such operation over the perineal one, with, however, associated disadvantages, so that extended experience alone will suffice to clearly indicate which should be regarded as preferable in the ordinary run of cases. In any and all forms and grades of chronic cystitis the prime indications of treatment are to remove the cause and give the organ rest; and just in proportion as these indications can be fulfilled will relief be afforded and a cure effected.—*Cincinnati Clinic.*

BLEEDING FROM THE NOSE OR EPISTAXIS.

This hæmorrhage may arise from two conditions of constitution. (1). It may arise in the young, plethoric, full-blooded subject, caused by vascular excitement owing to determination of blood to the head. It may also be vicarious, as when the menses are irregular in young full-blooded females (epistaxis helps to relieve the vascular tension), and also it may occur in woman at the change of life. (2). It may also be passive, arising from a low, debilitated condition of the constitution; and as a rule this form comes on in older subjects from a pasive draining of venous blood owing to some obstruction of the circulation such as disease of the heart or liver would induce, or to a morbidly thin state of the blood with general relaxation of the blood vessels, which is found in scurvy, purpura, and in the last stages of fever. Druitt mentions that from 15 to 25 is the commonest age for *active* epistaxis and from 45 to 55 for the *passive* form.

Treatment.—In cases of bleeding from the nose in young plethoric subjects, such hæmorrhage seems to do them a great deal of good, and gives great relief if they suffer from congestive headaches in hot weather, and this epistaxis may be looked on as very salutary, being merely nature's method to relieve the vascular tension of the blood. However, if it does not soon stop of its own accord, steps must be taken to stop it by therapeutic means. Some simple plans have been recommended:—(1) The hands to be held perpendicularly over the head. (2) A cold key to be placed under the clothes on the spine so as to act by reflex action. (3) Cold to be applied to the forehead and the patient to lie motionless on his back, for when the nose bleeds the patient generally leans over a basin with the head down. This position obviously favors its continuance. 4. Ether spray to be pumped on the outside of the nose at each side. A piece of ice applied to the back of the neck or the roof of the mouth will generally stop it. 5 Snuffing up the nostrils powdered alum, tannic acid or gallic acid or powdered nutmeg or cobweb so as to entangle the fibrin. A small plug of cotton wool may be introduced and left in the bleeding nostril, and the patient, cautioned not to blow the nose, as this will only disturb the natural clot, if forming. Wetting the cotton wool or strips of lint with strong alum water or dilute tincture of the perchloride of iron or dipping it in powder of tannin or matico, then introducing it up the nostril, will at times prove effective. (6) A wooden paper clip fastened across the bridge of the nose so as to compress the alæ together has also been pressed into service in such cases with a satisfactory effect. Pressure on the facial artery as it passes over the lower jaw has also been recommended. (7) Washing out the nostril with a continual flow of very cold or iced water. When the patient is directed to breathe through the mouth the soft palate is so raised up behind as to effectively close the posterior nares, and the water injected into one

nostril passes through the other nostril and escapes at the opposite anterior nares. This will frequently stop epistaxis. When everything has failed, and the bleeding still continues, plugging the posterior nares must be carried out. Some surgeons state that it is hardly ever necessary to plug the posterior nares, for they say if long, narrow strips of lint saturated in some styptic fluid are passed through the anterior nares, and by gentle manipulation by means of a probe or director, the nostril can be effectively packed as if the posterior nares were plugged. The plan is certainly much easier, and not at all so unpleasant to the patient, and well deserves a trial. Plugging the posterior nares can be either done by means of a catheter or by Belocq's canula. A plug of lint must be made about the size of the first joint of the surgeon's thumb; to the centre of this must be attached three long strings. If the catheter is used, a hole must be made in the end of it, through which is passed a loop of twine and tied; the catheter is then oiled and heated and gently introduced through the anterior nares of the bleeding nostril, and when it arrives at the posterior nares it must be gently urged onwards; the patient is then requested to open the mouth widely, and the end of the catheter with the twine attached will in all probability be seen beyond the soft palate; the loop of twine is to be seized with the forceps, to which are attached the *two* strings of the plug. The catheter is now withdrawn, carrying with it the two strings attached to the plug through the bleeding nostril. These strings must now be pulled tightly, and the plug with the other string attached is quickly carried through the mouth and guided with the index finger of the left hand until it is firmly wedged in the posterior nares. If bleeding goes on, strips of lint may be inserted in the nostril between the two strings, and by their means permanently retained there. The third string through the mouth may be fastened on the side of the cheek with a strip of plaster. The plug need not be kept in this position longer than thirty-six or forty-eight hours, by which time it generally gets very fœtid, and can be easily dislodged by pulling gently on the string that passes through the mouth. If Belocq's spring canula is used, precisely the same steps are taken as regards passing the canula and fixing the ends of the twine on the end of the spring canula, and drawing it back through the nares. So much for the local treatment of epistaxis. But it must be in some instances treated by constitutional means as well, and, in fact, no surgeon in serious epistaxis should be satisfied to depend on the local treatment alone. Hazeline, an American fluid preparation, has been strongly recommended—ten drops in half a wineglass full of water to be taken three times a day. Ergotine, ten drops to be injected under the skin, has also been found most useful. Mixtures containing gallic and tannic acids with ergot, aromatic sulphuric acid, and acid infusion of roses are also recommended where the blood is thin and deficient in fibrin. Preparations of iron, such as the muriated tincture, are indicated in low, debilitated subjects; the system should be toned up by nourishing albuminous diet, as the longer the debility lasts the more frequent will the attacks of epistaxis appear.

Bleeding from the Mouth, the result of Disease.—This form of hæmorrhage—unless when arising from ulceration—is in most cases from the gums, as in scurvy. The quantity at one time is never very large, but, if continuous, treatment must be adopted to stop it.

Treatment.—Mouth washes must be ordered containing astringent substances, viz., borax, tannic, and gallic acid, tincture of colchicum wine, myrrh. Alum made up with glycerine and rose water makes an excellent wash for such cases. The constitutional treatment, however, must not be lost sight of.

SHOULD POULTICES EVER BE USED AFTER AN ABSCESS OR WHITLOW HAS BEEN OPENED, OR TO AID THE SEPARATION OF SLOUGHS?

By CHAS. B. NANCREDE, M.D.,

Professor of General and Orthopædic Surgery in the Philadelphia Polyclinic, Surgeon to the Episcopal Hospital, Senior Surgeon to St. Christopher's Hospital.

Our reply to the above question is a most emphatic negative. Before an abscess or whitlow has reached the stage when either the patient consents to incision, or the surgeon is willing to lay it open, undoubtedly poultices serve a useful purpose. We are willing to go further, and admit that in the case of a felon, where sloughs have to be separated, or in a wound where the same process has to be gone through with, poultices will *hasten* the separation of dead tissue, but—and this is a most important "but"—*will the whole duration of the case be lessened, and will the minimum of danger result?* Most assuredly not. We cannot help thinking, for scientific reasons, that the vulgar belief has some truth in it, that prolonged poulticing causes death of the bone in some cases of whitlow. Let any unprejudiced surgeon compare the appearances presented by a poulticed felon, and one treated after the method I advocate, and I feel convinced that half my position will be readily conceded.

A few words as to the anatomy of the distal segments of the fingers will render more clear the truth of my pathological deduction. The distal phalanges have, in reality, *no* distinct *periosteum* as such, the whole fibro-fatty tissue of the finger pulp serving the purpose of a scaffolding for the support of the nutrient blood-vessels. Hence inflammation of this tissue so often ends in death of the bone, for it too commonly results in more or less sloughing of the pulp, *i.e.*, the periosteum dies and the bone with it.

It is not my present purpose to dwell upon the proper treatment of whitlow, only upon the best dressing after an incision has been made into one; but I would beg my readers to impress upon their minds the above anatomical fact, which will induce them, I believe, to freely incise a commencing whitlow *whether pus has already formed or not*, merely to save the vitality of a tissue upon which depends the life of the bone.

What, now, must be the effect of a poultice on such an inflamed tissue? The only chance of its regaining vitality sufficient to preserve the life of the phalanx is to have diminished the amount of congestion and the quantity of the inflammatory exudates, which are strangulating the blood supply. Again, we will not stop to argue whether the stable connective-tissue cells of the part proliferate, or whether only migrated white blood cells, or both, form the exudate, since the *mechanical* effect is the same. Heat and moisture in such a pathological condition tend to still more relax and therefore render, on hydrostatic principles, more sluggish the blood current, and nature is compelled, in the attempt to relieve this, to favor the egress of white blood-cells in larger and larger quantities. If the chief outflow of these takes place directly from the incision, well and good, but how if the migrating cells crowd into the already over-filled intersects of the pulp; can anything but further strangulation of the tissue and harm accrue? We have heretofore entirely ignored the rôle that micro-organisms play in suppuration and sloughing, but it cannot fail to be seen that, if modern views are correct, the heat and moisture of the nasty, dirty relic of barbarism, called a poultice, must present the most favorable condition for their development.

A glance at the condition of the circulation in the surrounding undoubtedly healthy parts will convince any unprejudiced person that at least I have some grounds for my crusade against poultices.

To a less degree, so far as strangulation of tissue goes, my remarks apply to a confused and sloughing wound. My opponents will say what have you better to offer us, to replace this easy, time-honored method of dressing? Simply some form of antiseptic dressing. It would be certainly difficult for me to recall when I have willingly employed a poultice for a suppurating cavity.

My preference for a whitlow is free incision soaking in a mercuric bichloride solution, dusting freely with iodoform and dressing with absorbent cotton impregnated with the same drug. This usually need only be removed on the third day after, unless pain and tension be complained of. For an abscess, free incision, with counter-incision, if necessary, at the most dependant portion, the introduction through both orifices of a *large* drainage tube, the thorough and repeated syringing out of the cavity with mercuric bichloride solution, and the same iodoform and cotton. For a contused and therefore a future sloughing wound, antiseptic irrigation should be used, with appropriate incision, if there seems to be much risk of inflammatory swelling; if not, merely iodoform and cotton.

To what cases can this method be applied? To all such as warrant conservative treatment. Within the last seven weeks I have treated eight severe confused and lacerated wounds of the upper and lower extremities, with perfect success, except in one instance, where spreading gangrene set in and necessitated a successful thigh amputation. Two of these cases were severe compound fractures, produced, one by a cart the other by a railroad train, while five were *very* severe "bumper crushes," *i.e.*, received by the limb being caught between the bumpers of cars, either while being coupled or when the motion of the train was checked. The damage done by such accidents rarely admits of conservative treatment, and I certainly have not met, in as many years, with so large a number of fortunate cases, affording such admirable results. As my experience goes back to the simple cerate, poultice and bran-dressing period, I am competent to judge of the very different results attained by antiseptic methods. But can these effects be achieved only by the dressing suggested? By no manner of means. Only let Listeria *principles* be put in force; and Lister's own own dressing, or a dozen modifications of it may be adopted. My personal preference is for the dressing suggested, on account of its simplicity, cheapness and efficacy.

Those who follow my advice will at first be disappointed by the primary tardiness of the cure. The sloughs separate only very slowly. But what matters it, if there be next to no pain, fever, or suppuration. So long as the wound is aseptic your patient is safe, and when the slough does separate, instead of macerated, soggy œdematous tissues, slow to take on healthy action, you will have a healthy wound which rapidly cicatrizes. Your patient will not be emaciated, have been unable to eat, with a coated tongue, and a disordered gastro-intestinal tract—quite the reverse.

Finally, do not continue the iodoform too long, as, after a certain point, it inhibits the healing process; and when you see the granulations becoming either over-florid, or pale œdematous, resort to the use of powdered boric acid. When the sore becomes a superficial one I commonly use zinc or resin cerates, having first washed the sore with the bichloride, or some other antiseptic solution, and powdered it freely over with boric acid.

Of course, after bad crushes suppuration will at times occur in the damaged intermuscular planes without any direct communication with the wound. This will cause a sharp rise of temperature, pulse, etc., but being aseptic, as soon as the pus is evacuated all these symptoms will subside in the course of twenty four hours, or less.

NURSING.

FOMENTATIONS.—Fomentations have almost the same action as poultices. They are often used alternately with poultices. They have the advantage

of being lighter, and therefore are better borne on tender surfaces. They are made by pouring boiling water over flannel, and then ringing the flannel out, shaking it up and applying it. They are to be covered with oiled silk, and fastened on with bandages. If wrung as dry as possible, there is very little danger of scalding or blistering, no matter how hot the flannel is.

The wringing can be done in an ordinary towel, but it is easier to do it by means of a roller towel. The flannel is placed in the centre of the roller towel in a basin, and boiling water is poured over it. Sticks are passed through each end of the towel, the centre is raised, the sticks twisted in opposite directions, and so the flannel is wrung out.

An ordinary towel will also do. It is spread over a basin, the flannel is placed upon it, and boiling water is poured in. The towel is then folded over the flannel, it is lifted out of the basin, and the two ends are twisted in opposite directions until the flannel is squeezed dry.

The flannel is shaken up in order to let the air into its substance and folds. Air being a bad conductor of heat, this causes the fomentation to retain its heat much longer than it would otherwise have done.

If poppy heads have been boiled in the water it will be more anodyne.

Spongio-piline, being porous at one side and water-proof at the other, does excellently for fomentations.

Twenty or thirty drops of turpentine, sprinkled on either the flannel or spongio-piline, is a good counter-irritant. It is often used when the abdomen is distended with air.

As fomentations rapidly become cool they must be frequently changed. When they are finally removed, the skin must be dried and covered with flannel, to prevent catching cold.

Dry heat is applied when warmth is necessary, and it is desired to avoid the relaxation of the tissues caused by moisture. Flannel, heated before the fire or in an oven, is used; also sand or bran, sewn in flannel bags and heated in an oven. Camomile flowers can also be used, and are lighter than sand. A flat tile, heated and wrapped in flannel, retains the heat for a long time.

One of the commonest ways of using dry heat is to apply tins, jars, or bottles of hot water to the feet. They ought to be wrapped in flannel, to prevent the skin being injured. Too great heat ought not to be applied to the unconscious or paralyzed.

Blisters.—Cantharides, or Spanish fly, is the general basis of blistering preparations. (The name Spanish fly, is misleading, the insect in question being really a beetle, and a native of Hungary.) When applied to the skin, it causes tingling, smarting and a sensation of heat; soon the true skin becomes congested, and an oozing takes place. The minute drops of serum enlarge and coalesce, forming different sized blebs. The outer skin or epidermis, is, of course, raised up by the fluid.

As a rule, blisters are employed as counter-irritants, and for this purpose redness and a minimum amount of vesication should never be employed, unless for some special object, as the contents of the vesicles is very similar in composition to blood, and it is found in practice to be as weakening as though the same amount of blood had been withdrawn.

The effect of counter-irritation may be shortly explained. It effects the nerve-endings, and through them causes an impression to be brought by the nerve-fibres to some portion of the brain. This causes another impression to be carried by other nerve-fibres, either to the spot where the counter-irritant was applied, or to some other portion of the body which receives nerves from that part of the brain.

Thus we find that the irritating the skin may have an effect on the brain. This is seen in some cases of coma, where consciousness is aroused by blisters applied to different parts of the body in rapid succession, and for a short time each, "flying blisters."

We also find that it may have an effect on some other part of the body. Thus a blister in one situation may ease pain in another. And, fortunately, we have a simple rule which helps to show where to make these applications. The nerve that supplies a joint or muscle also supplies the skin over it, so a superficial application generally affects the tissues beneath.

The common preparation of cantharides is a thick plaster. A piece the required size may be cut off a sheet, or some may be spread on sticking plaster, a margin of the latter being left to fasten the blister to the skin.

Blistering fluid is convenient, clean, and efficient. It is painted on with a camel's-hair pencil. The amount put on and the delicacy of the skin will regulate the effect.

A small blister can be readily made by putting some cotton wool into a silver thimble and pouring on it a few drops of strong solution of ammonia. The thimble is then inverted on the skin, and kept there for ten minutes. By this time a blister will have risen. Counter-irritant by mustard, iodide, or croton-oil liniment may often take the place of blistering.

The dressing of a blister deserves careful attention, as careless or ignorant handling may cause severe suffering. Unless specially directed to the contrary, a blister should not be opened, but be covered with a layer of soft cotton wool until the effused serum is absorbed. Even if the blebs are too large to admit of absorption, it is important to preserve the covering until the true skin has had time to form a new epidermis. The nerve endings (a touch to which causes such exquisite pain) are thus protected and the risk of ulceration is lessened.

THE DIETARY IN ACUTE DISEASES.

By J. Milner Fothergill, M.D.

Ed. Hon. M. D. Rush, Physician to the City of London Hospital for diseases of the chest.

Strange as it may seem, the present method of feeding persons acutely ill is nearly as irrational as if Majendie had never existed, and physiology remained an unborn science. Fashion has ruled the roost. Veal broth had given way to calves'-foot jelly when my acquaintance with sick persons commenced. The French committee had pronounced against gelatine as a food, but that did not weigh much with the public. If a sick man died without having been duly supplied with gelatine in the form of this jelly, loud and deep were the indignant comments of his neighbors. Then came a distinct improvement in the form of milk and seltzer water introduced from Germany. This being fluid-food, slaked the thirst, and soothed the dry fauces in pyrexia. It sat lightly on the stomach, and was agreeable to the palate. But after all the actual nutriment supplied by it was (practically) confined to the milk sugar. Clinical observations have been borne out by experiments to the effect that the digestive ferments are greatly impaired in illness. As to the absorption of fat in febrile states much doubt rests upon the subject. Being already in a fine emulsion some of the fat globules may find their way into the mouths of the lacteals of the intestinal villi, and so may afford some nutriment to the system. But of the digestion of the caseine it is even more doubtful if any go on.

Firm curdling is common, and this firm curd appears in the stools as hard white lumps. Consequently at the London Fever Hospital a strict watch is kept over the stools, and when pieces of white curd are detected means are taken to obviate this firm curdling. The two plans that suggest themselves are: (1), some mechanical agent like biscuit powder which will lessen the cohesion of the curdled mass; and (2), some stronger alkali than seltzer water, Vichy or Vals, or other water well charged with alkalies may be added to the milk in equal quantities; or another plan is to stir in some light carbonate of magnesia or prepared chalk. By such means the acidity is neutralised and a curd formed which is disintegrated by the liberation of the carbonic acid. Sir William Roberts, M. D., pointed out in his address before the British Medical Association at Cardiff, in July last, that the gas of champagne lightens up the mass of food in the stomach and so aids digestion. This disintegration of the milk curd is most desirable in any morbid condition.

But in pyrexial states it is very doubtful if the digestion of albuminoids is desirable even if practically attainable. During pyrexial states there is acute and active hystolysis. That is well known. Its nitrogenized tissues melt down under a sustained high temperature by a process of acute fatty degeneration. When convalescence sets in then tissue repair is active; and the keen appetite and capable digestion provide liberal supplies of albuminoid matter for the swift histogenesis then taking place. But while the hystolytic process is afoot tissue repair is impossible. In his opening address to the medical society of London (session 1885-86, Dr. Ord, the president, made reference to some experiments he had performed which went to show that the arrest of the normal histogenetic processes in pyrexial states is one factor in the increased heat production. To attempt, then to supply the albuminoids to the body in conditions of high temperature is to achieve no good end, and only to increase the risks and dangers which belong to a state of blood highly charged with excrementitious matter of nitrogenised character—in other words, the typhoid condition or uræmia.

Where there is little or no pyrexia present then the caseine of milk may be both digested and be useful. Beef tea containing some of the meat fibrine, too, is useful. Part, if not all, of the meat fibre ought to be beaten to a paste or a pulp and then returned to the infusion; by which means a distinct food-value is given to the beef tea. In acute gastric disturbance, in conditions of debility, as after hemorrhage, such forms of albumenoids are excellent; and supply the tissue needs until more solid food can be taken.

But in acute pyrexial states only fluid foods can be taken. The thirst causes a demand for fluids on the one hand, while fluid forms of food are best tolerated by the stomach. What should these fluid foods consist of? In the first place comes milk (with its soluble milk-sugar), which may be given with seltzer or other water, or as whey, or with water; in the latter case it is well to add some soluble carbo-hydrate, as any food consisting of predigested starch. Also a malt extract prepared as follows: reduce to consistency by the addition of a little water, until the fluidity is such that it will readily mix with some aerated water. This forms a most excellent food containing soluble carbo-hydrates of the most digestible character

Cereal matter which has been well-baked or malted is *par excellence* the food for pyrexial states. A certain conversion of the insoluble starch into soluble matters as dextrine (and maltose in malted preparations) has thus been brought about. Baked and malted preparations are now on the market in any quantity. Where prepared food contains malt it possesses diastase which can further carry on the starch conversion into or towards maltose in the presence of warmth and moisture. Such predigested and self-digestible food of farinaceous character can be used in various ways. It can be added to milk and increases its nutritive value. It is invaluable as an addition to beef tea, chicken broth and mutton broth, giving the beverage a distinct food value. It can be added to any soup which is best prepared from fish. It can be used with home-made lemonade, or apple water, lending to them a nutritive value.

Further such soluble carbo-hydrates (prepared according to the directions supplied with each "Food") form a fluid vehicle in which wine or spirits can be given pleasantly, when some stimulant is indicated.

Preparations of predigested starch are of unspeakable value in acute pyrexial states when the natural digestive powers are greatly impaired.—*Journal of Reconstructives.*

THE TREATMENT OF CHRONIC HEART DISEASE.

The observations of Dr. Schott, of Nauheim (*Berliner Klin. Wochensch.*, 1885, Nos. 33–36), since 1871, extend over 300 cases, and the clinical histories of a fair proportion of these are followed up. It will be remembered that Stokes was the first to advocate a life of active excercise in chronic heart disease. Indeed Stokes went so far as to say that, for a man with well-compensated valvular lesion, the greatest misfortune that could happen to him was to have his cardiac trouble discovered by a medical man. This was because a number of restrictions were, as a rule, imposed upon his usual mode of life, all tending to a debilitating illness. The consequences was that the heart-muscle, like the other muscles of body, lost strength, and dilatation of the heart supervened earlier than would otherwise have been the case. Stokes's doctrine of the positive value to the heart of a life of activity has received more attention on the Continent than amongst his own countrymen. In Germany, especially, it has been developed into a complete system of treatment, on various lines. Oertel, as is well known, prefers hill-climbing to any other method, care being taken to ward off any threatening dyspnœa by repeated stoppages, and by making a few deep voluntary respirations before proceeding. This mode of exertion is selected partly also from a desire to unload the venous system, and the right side of the heart in particular, by diminishing the volume of the blood generally; and the excessive perspiration induced by mountain expeditions does this gradually and effectually, the supply of liquid being duly restricted by removal of the excess of water from the blood.

Dr. Schott makes great use of stimulating baths, together with the systematic exercise of the various muscles of the body at home by the aid of an assistant; but the bath is made apparently the chief element of the treatment. An artificial Nauheim bath (apart from carbonic acid) may be rudely imitated by adding to sofitsh water 1 to 1½ per cent. of common salt, and as much per mille of chloride of calcium, the temperature being 93° F. Very weak patients have the water a little warmer, but not beyond 96° F.; and in all cases the bath should be a short one, a second chill being avoided. The baths are gradually made stronger, cooler, and the patient remains in longer, according as he improves. The full strength is from 2 to 3 per cent. of chloride of sodium, and from ½ to 1 per cent. of chloride of calcium, with carbonic acid. The last named may be supplied artificially by adding equal parts by weight of bicarbonate of soda and hydrochloric acid, the full strength being 1 kilogramme of each in a bath of 250 litres. But much smaller quantities suffice at first.

The exercises consist of various movements of the limbs and trunk, each movement being opposed by an assistant, who gives way as the patient exerts his strength. The greatest care is taken that the patient breathes easily the whole time. The details may be found in Dr. Schott's original article (*Berlin Klin. Wochensch.*, Nos. 33-36, 1885), reprinted as a pamphlet by Schumacher, of Berlin.

The therapeutic results have already been summarized in these columns. Suffice it to say, that diminution of the cardiac dullness during a course of baths can be actually demonstrated, and, as a rule, the improvement in the patient's condition is immediate and striking.

No alteration is made in the solid food, but Dr. Schott has for years restricted the fluid supply whenever high arterial pressure existed. Finally, mountain tours are recommended where there is obesity, but in moderation.

This system of baths and exercise is a rival to Oertel's mountaineering system, and possesses certain advantages in that it can be adopted at home, and can be regulated to a nicety to suit the patient. But Dr. Schott's observations lack the scientific precision of Prof. Oertel's. It is earnestly to be hoped that a more active life may be ordered by medical men generally in the treatment of heart disease. It is to be feared that a merely passive existence is still widely recommended to any unfortunate patients with (mitral) valvular lesion and dyspnœa.

TREATMENT OF THE HYSTERICAL ATTACK.

Dr. Albert Ruault gives a simple method which he had found very efficacious in controlling an hysterical fit. It consists in making firm and constant pressure over the supraorbital nerve at its point of emergence from the supraorbital foramen. The head is held securely between the palms of the hands, while pressure is made over the nerve on each side with the thumbs. The writer says that the patients under this treatment first contract the facial muscles with an expression of pain, cry out, and then take several quick successive inspirations. The breath is held for a few seconds and, then, with a long expiration, the muscles relax and the attack is ended. The pressure of the thumb should now be relaxed, otherwise it may have the opposite effect and excite another convulsion. Pressure over any nerve-trunk at the point where it becomes superficial will have the same effect; but the supraorbital nerves are chosen because of their convenient situation.—*France Médical.*

TREATMENT OF PIGMENT SPOTS OF THE SKIN.

According to Unna, borax and the bichloride of mercury are the medicaments most generally employed for the removal of pigment spots; the first is slow and mild in its action, rarely occasioning eczema; the second acts more energetically and rapidly.

If we desire to have the speediest possible effect, it is necessary to have recourse to mercury, not in the form prescribed by Hebra, which is inconvenient, but a solution of the sublimate in collodion (one half to one part). The danger will thus be avoided of provoking redness, desquamation, and sometimes even a bullous eruption.

These energetic treatments have one inconvenience; we cannot exactly measure the effect. On this account, it is preferable to employ the mercury and bismuth ointment proposed by Hebra. A piece of muslin coated with the ointment will enable us to obtain a more prompt effect than with feeble solutions, besides being much more convenient of application.

Small pieces of muslin, about the dimensions of the groups of freckles of chloasmic spots, should be smeared with the ointment, and after first removing the greasy matter from the surface with cologne or alcohol, they should be applied to the affected parts. The application should be made upon the patient's retiring at night, and washed off the next morning. Bandaging or collodion is unnecessary.

The author prescribes for use during the day a bismuth ointment, which has the advantage of masking the brown spots.

The following is the formula of the ointment:

℞ Oxide of bismuth,
Kaolin.....aa 5 grams
Vaseline.....20–40 "

M.

The ointment should be applied only to the pigmented spots, allowed to dry and not be removed for some time.

He also employs the following formula:

℞ Oxide of Bismuth,
Rice powder.....aa 2 grams
Ung. Glycerine..... 10 "
Eau de rose..... 20 gutt.

M.

By alternating the mercurial and bismuth applications, the pigment patches rapidly disappear without redness or desquamation, if the pigment be not so deeply situated in the derma that the remedies cannot reach it without destroying the papillary layer, as is the case in certain chronic chloasmas.

The following is Hebra's formula:

℞ Subnitrate of bismuth,
White precipitate..... aa 2 gr. 50
Lard.....50 grams.

M.

To be spread upon a piece of lint, and applied during the night to the pigmented patch.

Kaposi employs the following ointment in the same manner:

℞ Salicylic acid..... 2 grams
Emolient ointment.....40 grams

M.

Or.

℞ Boracic acid,
White wax.....aa 5 gram
Paraffin..... 10 " s
Oil of almonds..... 30 "

M.

Frictions with the ordinary mercurial ointments sometimes succeed well.—*Jour. de Med. de Paris*, No. XV., 1886, *Jour. Cutan. and Vener. Dis.*, July, 1886.

MEMORIZING DOSES.

Dr. G. A. Wiggins, of Philadelphia (*Med. World*, August, 1886), gives some general rules with their exceptions, which are thoroughly reliable:

1. The dose of all infusions is 1 to 2 ozs., except infusion of digitalis, which is 2 to 4 drs.

2. Dose of all poisonous tinctures is 5 to 20 minims, except tincture of aconite, which is 1 to 5.

3. Dose of all wines is from ½ to 1 fl. dr., except wine of opium, which is 5 to 15 minims.

Of all poisonous solid extracts you can give ½ gr., except extracts of calabar bean, which is $\frac{1}{16}$ to ¼ gr.

5. Dose of all dilute acids is from 5 to 20 minims, except dilute hydrocyanic acid, which is 2 to 8 minims.

6. Dose of all aquæ is from 1 to 2 ozs., except aqua lauro-cerasus and aqua ammonia, which are 10 to 30 minims.

7. Of all syrups you can give 1 drachm.

8. Dose of all mixtures if from ½ to 1 fl. oz.

9. Dose of all spirits is from ½ to 1 fl. dr.

10. Dose of all essential oils is from 1 to 5 minims.

EFFICIENT SEDATIVE COUGH MIXTURE.

When Dr. H. C. Wood recommends anything, it is a guarantee of its merit. Hence we take the following from the *Therapeutic Gazette*:

℞ Potassi citratis, ʒ j.
Sucai limonis, ij.
Syr. ipecac, ss.
Syr. simplicis, q. s. ad. ℥ vj.

M. Sig.—A tablespoonful from four to six times a day.

When there is much cough or irritability of the bowels, paregoric may be added.

DERMATOLOGY.

RINGWORM. (Dr. Henry Brown, Manchester.—*British Medical Journal*). The subjoined formula for the local treatment of ringworm is suggested by Dr. Payne's lecture on the treatment of that epiphytic disease. In sending it I am simply handing down a form received from others, and used in the out-patient practice of the Manchester infirmary, many years before the publication of the British Pharmacopœia. When the acidum sulphurosum was made official, it was used for a time instead, but we had to revert to the old form made up of materials fully recognized and explained in Squire's Companion. The form is: ℞. Sodæ hyposulphitis dr. j; solve in aquæ fl. oz. viij; et adde acidi hydrochlorici fl. dr. j; for outward use only. The use of this lotion, as water-dressing covered with oiled silk, and accompanied by daily washing in soft soap and water, has proved as perfectly satisfactory, as Dr. Payne says the principle of the treatment of ringworm is perfectly simple. It fulfils Dr. Payne's conditions, and kills the fungus. I presume the sulphurous acid gas acts beyond the limits of the aqueous solution.

URTICARIA. (*Lond. Med. Record*). Pilocarpine. In the case of a woman aged 53, suffering from widely spread urticaria, which had invaded the pharynx and caused intolerable itching, M. Piogey at first tried emetics, quinia, belladonna, and hypodermic injections of morphia, without decided benefit. He then injected two-thirds of a grain of pilocarpine, after which considerable improvement took place. Three injections effected a complete cure, and the eruption did not reappear.

REMEDIES FOR SKIN DISEASES IN THE FORM OF SPRAY. (Jour. of Cut. and Ven. Diseases). Dr. Hardaway highly recommends spray as a vehicle in the treatment of affections of the skin. His usual habit is to prescribe a solution of definite strength, from which the bottle of an ordinary handball apparatus is filled, and the patient is then directed to throw the fine spray on the parts affected. Any substance that is "sprayable" either in its liquid form (diluted or pure) or in a state of solution, may thus be employed; *e. g.*, carbolic acid, sulphate of zinc, lotions of grindelia robusta, thymol, liq. picis alkalinus, and fluid cosmoline, (medicated or not). In the case of the fluid cosmoline, the tube of the atomizer should be large. The spray finds its greatest range of usefulness in diseases affecting large areas, and in that class of disorders accompanied by itching and a more or less unbroken cuticle; viz., pruritus, urticari, papular eczema, and the like. In generalized pruritus he had good results from spraying on a lotion of the following sort: carbolic acid three to four drachms; glycerine one ounce; water, one pint. After the bottle of the atomizer has been filled, he sometimes directs the patient to add from five to ten drops of the oil of peppermint. The atomizer-bottle should be thoroughly shaken before the bulb is compressed, in order to diffuse the peppermint through the mixture; otherwise it would float on top.

THE CANADA MEDICAL RECORD.

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MONTREAL SEPTEMBER, 1886.

COLLEGE OF PHYSICIANS AND SURGEONS, PROVINCE OF QUEBEC.

On the 28th of this month (September) a committee, named at the first meeting of the new Board of Governors held in July last, to take into consideration and put into shape the proposed amendments to the Medical Act, met in Quebec. This committee was composed of the following governors: Drs. Hingston, George Ross, T. A. Rodger, F. W. Campbell, J. L. Leprohon and E. P. Lachapelle, of Montreal, and Drs. Lemieux, Belleau and de St. George, of Quebec. All were present except Drs. Hingston and de St. George. Their sitting was very protracted, extending over twelve hours, but their work was so well and thoroughly done, that when, on the following day, their report was presented to the governors of the College at their regular semi-annual meeting in Quebec, and discussed clause by clause, it was practically adopted without alteration. The changes which have been made and which, if assented to by the Legislature, will come into force after the 1st of January, 1888, are very sweeping in their character. First of all, our already really very hard preliminary examination is increased by the addition as obligatory subjects of Philosophy—(as taught by the books in use in the French and English schools) Physics and Elementary Chemistry. Only one examination will be held each year, and it will take place early in July. The fee will be $10, and either total or partial failure means loss of it all. No money will be returned. Those who fail *partially* will have a supplementary examination in September. A fee of $10 must be paid for this examination. Botany is cut out of the Medical Curriculum demanded by the College. Most likely, however, the Universities will con-

tinue it as before. A Central Examining Board will be formed, and will meet early in April. Laval University desired that this Board should meet in July, as being the time most convenient for her. She, however, has consented to so arrange her course as to terminate in March, and the time for the Central Board to meet will suit every one. The total cast of the Diploina of Membership will then be $50.00, this including the fees for both the Primary and Final examinations. This Board will only meet once every year. The second most important alteration is in the method of electing the Governors. The old plan of proxies is done away with, and each judicial district will, commencing with the next tri-annual election, be conducted by each district in the manner reported upon by a previous committee,and which was published in the Record for July last. The Universities will have, as at present, each two representatives. The city of Montreal and the City of Quebec 4 each. One representative from the Judicial Districts of Montreal, Quebec, Gaspé, Saguenay and Chicoutimi, Rimouski, Montmagny, Beauce, Kamouraska, Terebonne, Joliette, Richelieu, Bedford, St. Hyacinthe, Iberville, Beauharnois, Ottawa and Arthabaska; 2 for the city and district of Three Rivers; and 3 for the district of St. Francis—making in all forty Governors, as at present. Arrangements are made for reciprocal registration with all Provinces having a Central Examining Board.

The semi-annual meeting on the 29th was largely attended. Dr. Hingston, the newly-elected president, presided, and by his excellent chairmanship much expedited the business of the College. Several graduates took their license in course. A resolution was passed unanimously congratulating Dr. Hingston on his election as an Honorary member of the British Medical Association.

OFFICERS OF THE INTERNATIONAL MEDICAL CONGRESS.

The Executive Committee of the International Congress have finally elected the following officers for the Washington Congress of 1887:

President.—N. S. Davis of Chicago.

Vice-Presidents.—W. O. Baldwin of Montgomery, Ala.; Wm. Brodie of Detroit; W. W. Dawson of Cincinnati; E. M. Moore of Rochester, N.Y.; J. A. Grant, Ottawa, Canada; T. G. Richardson of New Orleans; L. A. Sayre of New York; J. M. Tonor of Washington; the President of the American Medical Association; the Surgeon-General United States Army; Surgeon-General United States Navy; Supervising Surgeon-General Marine Hospital Service.

Secretary-General.—J. B. S. Hamilton, U. S., Marine Hospital Service.

Treasurer.—E. S. F. Arnold of New York.

Chairman Finance Committee.—Richard J. Danglison, Philadelphia.

Chairmen of Sections were also elected, but we have not room for their names.

We must confess that as a whole, these names do not appear to be as representative as we would wish. We, however, hope that now all past differences will be forgotten, and that all will work loyally to make the Congress a great success.

THE ORIGIN OF SCARLET FEVER.

Dr. Cameron, of London, England, claims to have discovered the fact that a vessicular disease on the teats and udder of cows is capable of producing, through milk, scarlet fever in the human being. The London *Lancet* says of this discovery: "We have no hesitation in expressing our belief that we are at last brought face to face with the origin of the disease." The British Government have taken the matter up, and it will be fully investigated. It would indeed seem as if we were on the eve of a discovery, only second in its importance, to vaccination.

TORONTO ITEMS.

A new and handsome operating-room has been built in the Toronto General Hospital. It is said to be capable of giving accommodation to about six hundred students.

The Ontario Medical Council is about to erect in Toronto a handsome building for its occupation. When we realize the folly of our perambulating system for our College of Physicians and Surgeons, we may hope to emulate the example of our Ontario brethren. But we fear that time is a long way off. Indications do not show any tendency in that direction now. Just the opposite, if one judges by the temper displayed by our Quebec friends, when it was suggested at the special meeting of the College held in July last, to locate permanently in Montreal.

The profession in Toronto and Ontario generally seem pleased at the information which has reached them, that the new British Medical Act takes away from old country graduates and licen-

trates, the right which they have heretofore possessed of insisting upon registration, without the further examination demanded by the Ontario Medical Council.

The meeting of the American Health Association in Toronto early in October, is a most important event, and we are glad to hear that everything points to a most successful gathering. We hope that Montreal will be well represented.

The Toronto Medical Schools are busy preparing for their winter's work, and the prospect of large classes is excellent. Toronto is working strongly to become the centre of medical education for the Dominion. Some claim it is so already. In our opinion one Montreal School is, by her hospital monopoly, doing much to assist her sister city to attain this end. Montreal must wake up—increase her hospital staffs—and thus her clinical instructors or will soon be compelled to take a back seat.

PERSONAL.

Drs. Hingston, Armstrong, Wood, McConnell, Major and Cameron, of Montreal, who have been in Europe for several months, have all returned during the last few weeks in time to look after their patients, who about the first week in September returned in large numbers from the seaside resorts.

Dr. Blackader, of Montreal, has left for Europe, intending to pass a few months there.

Dr. Ralph Leslie, of Toronto, has been decorated with the order of Leopold by the King of Belgian for his services on the Upper Congo.

Dr. Roseburgh, of Hamilton, was at the meeting of the British Medical Association last month.

Dr. Roddick, Montreal, sailed by the *Parisian* for Liverpool, on the 9th of September, for a hurried visit. He returns early in October.

Dr. Hingston, of Montreal, has been elected an Honary member of the British Medical Association.

REVIEWS.

Clinical Notes on Uterine Surgery. By J. Marion Sims, A.B., M.D., late Surgeon to the Woman's Hospital, N.Y., &c., &c., &c.

It is with mingled feelings of sorrow and respect for the ever-lamented and gifted author that one takes up "Clinical Notes" upon a branch of the profession in which he was, without question, the foremost exponent of his day. In fact, his brilliant genius may be fairly said to have broken the shackles of superstition which seemed to have attracted the minds of surgeons upon the subject of gynæcology up to his day. As was to be expected, the "Notes" are full of originality and invention, and the author was too great and noble a man to hide any mistakes in working out the great problems to which he was so devoted. The one story of the invention of his speculum is full of instruction, and shows the value of noting with care every fact that comes under our observation.

On menstruation we again see the character of our author, drawing valuable deductions from careful observation. His remarks upon "menorrhagia from fibroid engorgement of the cervix" shows the happy results attainable by the same method. Sponge tents are brought before us with much interest, inasmuch as, after years of experimenting with various forms of tents, the profession has once more, almost unanimously, decided the sponge tents, properly and carefully prepared, as the best, not only for dilating the uterine canal, but also as valuable therapeutic agents in suitable cases. The chapter on uterine polypi is very instructive, and as the writer details the great advances made in gynæcology the story is most instructive and pleasing. The chapter on menorrhagia from uterine fibroids, while interesting, yet fails to give the best and safest of all modes of treatment, in extirpation of the uterine appendages as first performed by Dr. Trenholme, of Montreal, in Jany., 1876.

The chapter on inversion of the uterus gives all that was known at the time, and we notice that the credit of reduction of that organ by pressing in the agles or cornuæ lately given to Neggerath, had its origin in the inventive genius of our author.

The chapter upon dysmenorrhea is most instructive, and the author's views as to the mechanical causes of this disease are clearly and forcibly illustrated. The extent to which he carries divisions of the cervix would be considered rather heroic in the present day. Notwithstanding, the fear of creating cases for Emmet's operation, yet we think many cases would be benefited by it.

The chapter on abnormalities of the os tincae is very interesting and instructive on account of the rather ultra mechanical views of the author as to terseness.

When treating of the abnormal conditions met with in the cervix uteri, he says that, "if the cervix projects into the vagina a full half inch it is very likely to be associated with the sterile state; if an inch the case is almost necessarily sterile; if it should be still more elongated, say one and a half or two inches, it becomes absolutely so; and if it does not project into the vagina at all, it is equally sterile. Here remarks from such a master are worthy of attention by every gynæcologist, yet cases have come under my own care where the latter condition obtained and the lady was a mother of several children.

Dr. Sims' remarks upon the importance of the cervix uteri being of proper size, form and density are clearly stated, and will be illustrated by cases in his practice. The elongated conoid cervix is specially dealt with as a factor in sterility.

When speaking of uterine displacements as causing sterility many important points are discussed with which every gynæcologist and general practitioner would do well to refresh their memories. The way Dr. Sims illustrates his subject by cases in practice is of all possible ways of teaching the most happy and instructive—not only do we follow with eagerness the actings of his own untrammelled mind, but are taught for ourselves to thus act independently. He asks: "how am I to impress upon minds the truth of my views but by giving them the facts and circumstances that have gradually led my own convictions where I myself find them, without any prejudices or preconceived opinions on the subject?"

When discussing anteversions, the value of shortening the anterior wall of the vagina in special cases is illustrated by cases, in which the success he attained warrants further work in the same line.

Retroversions are treated in a way to discourage the abuse of pessaries, while, at the same time, value of these instruments in suitable cases and with proper precautions are insisted upon.

It is very instructive to note the frank way the author speaks of the origin of his operations for procedentia uteri, and at the same time gives his reasons for the adoption of each. Dr. Sims says: "It is always interesting to watch the slow degrees by which true principles of treatment are established. The idea of narrowing the vagina for the cure of procedentia was first suggested by Marshall Hall, but I do not know that the operation ever succeeded. Then I carried out the principle by cutting away the whole of the redundant portion of the anterior wall of the vagina. This I afterwards modified by simply denuding a large oval surface on the anterior wall and uniting its lateral edges by silver sutures. This was further modified by making a V-shaped scarification and producing a veritable fold in the wall of the vagina. Then I made the V trowel shaped, by turning its upper ends inwards across the axis of the vagina, etc. This was afterward modified by Emmet, who simply narrowed the vaginal outlet at the anterior cul de-sac, and found this to answer the purpose."

Sec. VI. begins with the statement that "the vagina must be capable of receiving and of retaining the spermatic fluid." This assertion, which of course commends itself to our judgment, is enforced by reference to conditions that operate to prevent its accomplishment.

These conditions are illustrated by cases in the author's usual happy way, which enables the reader to gain a closer apprehension of the points brought out than is possible by any other method. The story of his treatment of vaginismus and the steps that led to his method of dealing with this trouble read like a romance, only every point is full of deep interest and instruction. The author's views of treatment for non-retention of the semen in the vagina as a cause of sterility are worthy of attention, and the more so as this is too much overlooked.

Sec. VII. "For conception, semen with living spermatozoa should be deposited in the vagina at the proper time." This, though a well-known fact, is illustrated in the author's peculiarly happy and lucid way in which we see what it costs to work out facts so well-known by students in physiology of the present day.

Sec. VIII. The secretions of the cervix and vagina should not poison or kill the spermatozoa" The various kinds of secretions that prevent conception are dealt with and illustrated by cases which fix the facts in the mind. Many points are brought out that have been over-looked by most writers upon gynæcology and yet which must add very greatly to the success of the practitioner in dealing with many of these most difficult and trying cases. We commend this volume to the careful perusal of every student, and feel sure that no other extant will be more productive of fruitful results in the advancement of gynæcology.

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